Feb. 2012

SERVICE MANUAL ADDENDUM

IC-2300H

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PARTS LIST

[LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC3	1110006470	S.IC LMV324IPWR	B	27.5/17.6
IC4	1110007620	S.IC NJU7704F3-42A-TE1-#ZZZB	B	111.6/23.2
IC5	1130016260	S.IC BR24T64FVT-WE2	B	113.2/4.1
IC6	1130011770	S.IC CD4066BPWR	B	40.9/18.2
IC24	1110006490	S.IC LMV321IDCKR	B	17.9/14.0
IC25	1110007200	S.IC M61545AFP#DF0R	T	26.1/18.4
IC28	1130011770	S.IC CD4066BPWR	B	13.3/22.3
IC29	1130011760	S.IC CD4094BPWR	B	50.5/25.2
IC30	1130011760	S.IC CD4094BPWR	B	49.5/17.9
Q1	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	14.7/8.6
Q2	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	45.5/11.4
Q3	1590004390	S.TRA DMG504010R	B	53.7/9.4
Q5	1590004100	S.TRA LDTC144TET1G <SLVJ>	B	85.8/15.1
Q7	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	79.9/16.8
Q8	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	76.7/12.3
Q10	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	77.4/16.8
Q11	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	80.1/12.5
D1	1790001810	S.VAR AVR-M1005C080MTABB	B	15.2/11.8
D2	1750001810	S.DIO L1SS400T1G <SLVJ>	B	10.2/7.4
D3	1750002040	S.ZEN DZ2J091M0L	B	2.8/10.9
D4	1750001850	S.DIO LDAN222T1G <SLVJ>	T	111.7/15.6
D6	1750000370	S.DIO DA221 TL	B	87.7/16.4
Eqv.	1750001820	S.DIO LRB706F-40T1G <SLVJ>		
D7	1750001850	S.DIO LDAN222T1G <SLVJ>	T	98.3/1.7
D8	1750001850	S.DIO LDAN222T1G <SLVJ>	T	62.3/1.7
D9	1750001850	S.DIO LDAN222T1G <SLVJ>	T	50.3/1.7
D12	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	125.7/5.1
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
D13	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	126.9/5.1
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
D16	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-01]	B	128.1/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D17	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	129.3/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D21	1750001850	S.DIO LDAN222T1G <SLVJ>	T	108.6/1.7
D22	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	125.7/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D23	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	126.9/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
D25	1750000771	S.VAR HVC376BTRF-E	B	84.4/6.2
D27	1750001810	S.DIO L1SS400T1G <SLVJ>	B	125.7/10.1
D28	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	126.9/10.1
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D32	1750001810	S.DIO L1SS400T1G <SLVJ>	B	7.0/4.9
D33	1750001810	S.DIO L1SS400T1G <SLVJ>	B	99.0/5.0
D36	1750001810	S.DIO L1SS400T1G <SLVJ>	T	112.5/13.2
D37	1750001810	S.DIO L1SS400T1G <SLVJ>	B	87.8/18.1
X1	6050013180	S.XTA CR-910(HC-49US/9.8304 MHz) <JJE>	B	89.8/7.9
R1	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	17.0/15.8
R2	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	15.8/15.4
R3	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	17.0/11.8
R5	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	14.9/15.4
R6	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	20.1/13.8
R7	7510001770	S.THE NTCG10 4LH 473JT	T	112.1/23.0
R8	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	12.5/7.3
R9	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	12.0/8.5
R10	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	14.7/6.8
R11	7030005830	S.RES RR0510P-223-D (22K)	T	112.6/24.2
R12	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	12.9/8.5
R14	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	14.0/15.4
R15	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	13.1/15.4
R16	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	55.5/13.3
R17	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	54.1/12.8
R18	7030008310	S.RES ERJ2GEJ 564 X (560K)	B	45.6/26.3
R19	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	34.3/21.3
R21	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	53.7/11.6
R24	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	51.6/9.8
R25	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	51.6/10.7
R27	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	44.4/13.0
R28	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	51.6/8.0
R29	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	55.4/9.8
R30	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	27.1/13.6
R31	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	105.4/7.9
R32	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	B	54.4/6.6
R34	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	52.0/6.8
R35	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	30.3/14.4
R36	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	96.5/6.6
R37	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.4/8.2
R39	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	33.4/16.0
R40	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	93.0/17.2
R41	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	84.8/7.3
R45	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	B	32.1/22.6
R47	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	11.8/6.4

[LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R48	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	93.3/8.9
R49	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	32.1/21.7
R50	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	32.9/18.4
R51	7030005530	S.RES ERJ2GEJ 100 X (10)	B	92.2/10.8
R53	7030007310	S.RES ERJ2GEJ 155 X (1.5M)	B	32.5/19.6
R56	7030003660	S.RES ERJ3GEYJ 683 V (68K)	B	35.1/15.4
R57	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	107.9/4.7
R58	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	108.8/4.7
R59	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	87.6/14.5
R60	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	106.3/8.8
R61	7210003340	VAR R0903N-B50KL-20F <SKD>		
R62	7210003340	VAR R0903N-B50KL-20F <SKD>		
R64	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	42.7/22.4
R67	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	42.8/13.0
R69	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	41.4/14.5
R70	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	42.3/14.5
R72	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	38.6/15.0
R73	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	38.6/14.1
R74	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	38.6/13.2
R76	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	21.7/19.3
R78	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	22.2/18.1
R79	7030007280	S.RES ERJ2GEJ 331 X (330)	B	81.6/16.3
R80	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	78.5/11.0
R81	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	22.1/20.5
R82	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	79.7/10.8
R83	7030007260	S.RES ERJ2GEJ 330 X (33)	T	44.5/18.2
R84	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	22.6/21.7
R85	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	80.5/14.6
R86	7030007260	S.RES ERJ2GEJ 330 X (33)	T	43.6/18.2
R87	7410001130	S.ARR EXB28V102JX	B	112.5/14.8
R88	7030007260	S.RES ERJ2GEJ 330 X (33)	T	66.5/18.2
R89	7030007260	S.RES ERJ2GEJ 330 X (33)	T	65.6/18.2
R90	7030007280	S.RES ERJ2GEJ 331 X (330)	B	79.2/14.6
R91	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	29.8/21.6
R92	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	30.3/19.5
R93	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	59.0/21.4
R94	7030007260	S.RES ERJ2GEJ 330 X (33)	T	88.5/18.2
R95	7030007270	S.RES ERJ2GEJ 151 X (150)	B	76.7/14.6
R97	7030007260	S.RES ERJ2GEJ 330 X (33)	T	87.6/18.2
R99	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	78.0/14.6
R101	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	8.2/14.7
R103	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	22.6/16.0
R104	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	20.8/17.0
R105	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	22.2/17.2
R108	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	111.2/20.6
R114	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	81.5/7.3
R133	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	94.7/8.0
R134	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	44.4/25.9
R135	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	127.5/26.6
R137	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	107.2/8.0
R519	7030005010	S.RES ERJ2GEJ 681 X (680)	B	34.6/16.4
R554	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	82.7/7.7
R555	7410001130	S.ARR EXB28V102JX	T	106.0/15.4
R556	7410001130	S.ARR EXB28V102JX	T	106.1/12.4
R557	7410001130	S.ARR EXB28V102JX	T	102.5/11.0
R558	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	56.4/13.3
R559	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	56.4/10.9
R561	7030010040	S.RES ERJ2GEJ-JPW	B	100.0/4.4
R562	7030010040	S.RES ERJ2GEJ-JPW	B	91.0/11.3
R563	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	45.6/25.4
R564	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	51.3/22.1
R565	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	48.0/22.1
R566	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/26.9
R567	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/26.0
R568	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/25.1
R569	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/24.2
R570	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	130.4/23.3
R572	7030010040	S.RES ERJ2GEJ-JPW	B	20.1/14.7
R573	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	7.1/6.9
R574	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	42.6/21.5
R575	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	35.5/19.1
C4	4030011600	S.CER C1608 JB 1E 104K-T	T	113.6/25.5
C5	4030017420	S.CER C1005 CH 1H 470J-T	B	59.9/20.6
C7	4030017460	S.CER C1005 JB 1H 102K-T	B	60.3/13.2
C8	4030016790	S.CER C1005 JB 1E 103K-T	B	18.3/12.2
C10	4030017460	S.CER C1005 JB 1H 102K-T	B	60.8/20.5
C11	4030017460	S.CER C1005 JB 1H 102K-T	B	3.5/7.2
C13	4030017460	S.CER C1005 JB 1H 102K-T	B	61.2/13.2
C14	4030017460	S.CER C1005 JB 1H 102K-T	B	72.3/20.5
C15	4030017460	S.CER C1005 JB 1H 102K-T	B	62.8/20.5
C16	4030017460	S.CER C1005 JB 1H 102K-T	B	2.9/13.0
C20	4030017460	S.CER C1005 JB 1H 102K-T	B	6.0/6.0
C23	4030017460	S.CER C1005 JB 1H 102K-T	B	8.4/6.9
C28	4030017460	S.CER C1005 JB 1H 102K-T	B	11.9/16.8
C30	4030017420	S.CER C1005 CH 1H 470J-T	B	65.3/13.2
C31	4030017420	S.CER C1005 CH 1H 470J-T	B	16.1/11.8
C33	4030013960	S.CER C1005 JB 1C 473K-T	B	13.1/17.0
C34	4030017790	S.CER C1005 JB 1H 682K-T	B	54.6/14.0
C35	4030017040	S.CER C1005 JB 1A 333K-T	B	52.8/11.6
C37	4030016790	S.CER C1005 JB 1E 103K-T	B	50.0/10.7
C38	4030018080	S.CER C1005 JB 1H 182K-T	B	51.6/11.6
C39	4030017460	S.CER C1005 JB 1H 102K-T	B	95.6/7.5
C41	4030016930	S.CER C1005 JB 1A 104K-T	B	33.8/22.5
C42	4030016950	S.CER C1005 JB 1A 473K-T	T	25.9/13.2
C43	4030016950	S.CER C1005 JB 1A 473K-T	B	44.0/11.8
C44	4030018390	S.CER C1005 JB 1A 563K-T	T	28.3/13.2

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C45	4030016790	S.CER	C1005 JB 1E 103K-T	B	96.5/5.0
C46	4030016970	S.CER	C1005 JB 1E 223K-T	B	56.6/8.1
C47	4030016930	S.CER	C1005 JB 1A 104K-T	B	34.9/17.6
C48	4030017760	S.CER	C1005 JB 1H 222K-T	B	56.6/7.2
C49	4030016930	S.CER	C1005 JB 1A 104K-T	B	109.8/22.7
C51	4030017030	S.CER	C1005 JB 1A 273K-T	B	111.4/25.0
C52	4030017420	S.CER	C1005 CH 1H 470J-T	T	7.3/27.6
C53	4030017690	S.CER	C1005 CH 1H 121J-T	B	86.1/6.7
C54	4030016790	S.CER	C1005 JB 1E 103K-T	B	33.4/21.2
C55	4030017620	S.CER	C1005 CH 1H 100C-T	B	92.9/10.1
C56	4030017760	S.CER	C1005 JB 1H 222K-T	B	32.1/20.8
C57	4030018110	S.CER	C1005 JB 1H 272K-T	B	33.4/19.6
C58	4030017780	S.CER	C1005 JB 1H 472K-T	T	106.1/17.1
C59	4030017640	S.CER	C1005 CH 1H 150J-T	B	94.0/9.5
C60	4030017780	S.CER	C1005 JB 1H 472K-T	B	110.7/13.2
C61	4030017780	S.CER	C1005 JB 1H 472K-T	T	110.3/12.7
C62	4030016930	S.CER	C1005 JB 1A 104K-T	B	110.7/6.5
C64	4030016790	S.CER	C1005 JB 1E 103K-T	B	85.9/13.5
C66	4030016790	S.CER	C1005 JB 1E 103K-T	B	43.5/15.0
C67	4030019560	S.CER	GRM21BB31C106KE15L	T	95.4/17.6
C68	4030016930	S.CER	C1005 JB 1A 104K-T	T	99.0/10.9
C69	4030016960	S.CER	C1005 JB 1E 183K-T	B	42.6/23.3
C70	4030016790	S.CER	C1005 JB 1E 103K-T	T	111.7/24.2
C71	4030016790	S.CER	C1005 JB 1E 103K-T	B	40.2/14.1
C73	4030019620	S.CER	GRM188B31C225KE14D	B	40.7/13.0
C74	4030018920	S.CER	C1005 JB 1H 392K-T	B	20.5/20.5
C75	4030017450	S.CER	C1005 JB 1H 271K-T	B	22.6/19.3
C76	4030017040	S.CER	C1005 JB 1A 333K-T	B	21.4/22.2
C77	4030019620	S.CER	GRM188B31C225KE14D	T	31.3/20.0
C78	4030016790	S.CER	C1005 JB 1E 103K-T	B	26.1/14.4
C79	4030017440	S.CER	C1005 CH 1H 221J-T	B	21.7/16.0
C80	4030019990	S.CER	C1005 JB 1C 104K-T	B	82.7/6.1
C82	4030017460	S.CER	C1005 JB 1H 102K-T	B	83.6/7.7
C83	4030016930	S.CER	C1005 JB 1A 104K-T	T	29.4/19.5
C85	4030019990	S.CER	C1005 JB 1C 104K-T	B	22.1/14.8
C86	4030017460	S.CER	C1005 JB 1H 102K-T	B	10.1/23.7
C87	4030018890	S.CER	C1005 JB 0J 224K-T	B	108.1/8.0
C88	4030018890	S.CER	C1005 JB 0J 224K-T	B	45.2/27.5
C89	4030016930	S.CER	C1005 JB 1A 104K-T	B	46.2/15.4
C90	4030017780	S.CER	C1005 JB 1H 472K-T	T	100.4/11.6
C91	4030017780	S.CER	C1005 JB 1H 472K-T	B	109.4/9.6
C92	4030017780	S.CER	C1005 JB 1H 472K-T	T	104.5/10.9
C94	4030017780	S.CER	C1005 JB 1H 472K-T	B	110.0/12.3
C95	4030017780	S.CER	C1005 JB 1H 472K-T	B	110.0/11.4
C96	4030017780	S.CER	C1005 JB 1H 472K-T	B	109.4/10.5
C97	4030017780	S.CER	C1005 JB 1H 472K-T	T	106.1/10.7
C99	4030017770	S.CER	C1005 JB 1H 332K-T	B	56.8/12.1
C100	4030017720	S.CER	C1005 JB 1H 331K-T	B	57.6/10.0
C101	4030016930	S.CER	C1005 JB 1A 104K-T	B	53.0/21.9
C102	4030018890	S.CER	C1005 JB 0J 224K-T	B	106.9/6.8
C103	4030017460	S.CER	C1005 JB 1H 102K-T	B	58.0/13.4
C104	4030017460	S.CER	C1005 JB 1H 102K-T	B	111.7/19.4
C105	4030016930	S.CER	C1005 JB 1A 104K-T	B	44.4/24.3
C108	4550007080	S.TAN	TEESVA 1C 106M8R	B	9.5/17.4
Eqv.	4550008220	S.TAN	F931C106MAA		
C109	4030016970	S.CER	C1005 JB 1E 223K-T	B	36.1/20.9
J1	6450002210	CON	3017-8821 <KIN>		
J3	6510028390	S.CON	04-6294-036-000-800	B	66.0/16.9
DS1	5030003530	LCD	L1-1207TVM-1 <TES>		
DS3	5040003470	S.LED	HT-297UY/UYG <KOU>	T	44.0/20.0
DS5	5040003470	S.LED	HT-297UY/UYG <KOU>	T	55.0/20.0
DS6	5040003470	S.LED	HT-297UY/UYG <KOU>	T	66.0/20.0
DS7	5040003470	S.LED	HT-297UY/UYG <KOU>	T	77.0/20.0
DS8	5040003470	S.LED	HT-297UY/UYG <KOU>	T	88.0/20.0
DS9	5040003470	S.LED	HT-297UY/UYG <KOU>	T	99.0/20.0
S1	2260002740	S.SWI	LS8J2M-T	T	10.0/30.6
S2	2260002740	S.SWI	LS8J2M-T	T	101.5/4.8
S3	2260002740	S.SWI	LS8J2M-T	T	89.5/4.8
S4	2260002740	S.SWI	LS8J2M-T	T	77.5/4.8
S5	2260002740	S.SWI	LS8J2M-T	T	65.5/4.8
S6	2260002740	S.SWI	LS8J2M-T	T	53.5/4.8
S7	2260002740	S.SWI	LS8J2M-T	T	41.5/4.8
S8	2260002740	S.SWI	LS8J2M-T	T	10.0/21.3
S9	2250000700	ENC	EC12E24204A8		
S10	2260002740	S.SWI	LS8J2M-T	T	111.8/4.8
EP1	6910018460	S.BEA	MMZ1005Y102C-T	B	15.6/13.2
EP2	6910012350	S.BEA	MMZ1608Y 102BT	T	11.5/14.6
EP3	6910018460	S.BEA	MMZ1005Y102C-T	B	12.2/15.4
EP4	6910018460	S.BEA	MMZ1005Y102C-T	T	9.7/14.4
EP5	6910018460	S.BEA	MMZ1005Y102C-T	B	8.4/8.5
EP6	6910018460	S.BEA	MMZ1005Y102C-T	B	7.1/8.5
EP7	6910018460	S.BEA	MMZ1005Y102C-T	T	6.4/14.7
EP8	6910012350	S.BEA	MMZ1608Y 102BT	B	4.6/8.0
EP9	8930084270	LCD	SRCN-3251-SP-N-W		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
IC2	1130011760	S.IC	CD4094BPWR	B	44.3/4.4
IC3	1110007720	S.IC	AA32416A <SLVJ>	B	95.9/11.4
IC4	1130007021	S.IC	TC7S66FU(TE85LF)	T	57.1/17.6
IC5	1110007550	S.IC	R2A20178NP	T	74.3/12.8
IC6	1180001252	S.IC	TA7808F(TE16L1NQ)	B	10.0/38.9
IC7	1110003091	IC	LA4425A-E		
IC8	1180003470	S.REG	NJM2835DL1-05-TE1-#ZZZB	B	11.2/48.5
IC9	1110006470	S.IC	LMV324IPWR	T	77.9/26.5
IC10	1110006870	S.IC	UPC2709TB-E3	B	40.7/26.3
Q1	1530002851	S.TRA	2SC4116-BL(TE85RF)	T	88.4/14.8
Q2	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	15.5/30.8
Q3	1510000591	S.TRA	2SA1362-Y(TE85LF)	B	15.8/33.8
Q4	1590004050	S.TRA	LDTA144EET1G <SLVJ>	T	99.3/3.9
Q5	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	35.0/29.9
Q6	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	29.7/15.6
Q7	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	31.7/17.7
Q8	1590004040	S.TRA	LDTA123YET1G <SLVJ>	B	31.8/21.3
Q9	1590004070	S.TRA	LDTC144EET1G <SLVJ>	B	88.9/6.5
Q10	1560000541	S.FET	2SK880-Y(T5RICOMF)	T	56.9/13.1
Q11	1590004070	S.TRA	LDTC144EET1G <SLVJ>	T	43.9/11.9
Q12	1590004040	S.TRA	LDTA123YET1G <SLVJ>	B	11.0/29.4
Q13	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	34.8/15.7
Q14	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	36.3/21.1
Q15	1590004040	S.TRA	LDTA123YET1G <SLVJ>	B	11.0/31.5
Q16	1590004070	S.TRA	LDTC144EET1G <SLVJ>	B	12.3/33.6
Q17	1530002931	S.TRA	2SC4228-T1 Y45 (R45)	B	34.2/25.7
Q20	1530003091	S.TRA	2SC4213-B(TE85RF)	B	21.1/4.3
Q21	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	T	22.6/45.2
Q22	1560001241	S.FET	RD01MUS1-T113	T	30.4/49.4
Q23	1520000460	S.TRA	2SB1132 T100 R	B	19.0/52.5
Eqv.	1520000910	S.TRA	2SB1132L-R-AB3-R <SLVJ>		
Eqv.	1520000201	S.TRA	2SB798-T2-AZ DK		
Q24	1520000460	S.TRA	2SB1132 T100 R	B	19.0/44.7
Eqv.	1520000910	S.TRA	2SB1132L-R-AB3-R <SLVJ>		
Eqv.	1520000201	S.TRA	2SB798-T2-AZ DK		
Q25	1590004690	S.TRA	LDTC143ZET1G <SLVJ>	B	21.1/39.0
Q26	1560001770	S.FET	RD04HMS2-T112	T	29.6/55.9
Q27	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	86.7/13.6
Q28	1580000731	S.FET	3SK293(TE85LF)	B	82.4/21.6
Q29	1560001780	S.FET	RD70HUF2-T1105	B	60.0/54.7
Q31	1590004050	S.TRA	LDTA144EET1G <SLVJ>	T	71.1/22.7
Q32	1580000731	S.FET	3SK293(TE85LF)	B	102.1/22.6
Q33	1560001790	S.FET	LN2306LT1G <SLVJ>	T	27.2/9.8
Q34	1590004070	S.TRA	LDTC144EET1G <SLVJ>	T	29.0/7.0
Q35	1560001790	S.FET	LN2306LT1G <SLVJ>	T	25.5/6.6
Q36	1560001790	S.FET	LN2306LT1G <SLVJ>	T	21.1/23.0
Q37	1560001790	S.FET	LN2306LT1G <SLVJ>	T	20.4/26.3
Q38	1590004060	S.TRA	LDTC114EET1G <SLVJ>	T	23.8/23.9
Q39	1590004070	S.TRA	LDTC144EET1G <SLVJ>	B	10.8/27.4
D1	1750001790	S.DIO	1SS390 TE61	T	104.2/9.2
Eqv.	1750002480	S.DIO	1SS390 <KMC>		
Eqv.	1750000571	S.DIO	1SS381(TPH3F)		
Eqv.	1750001700	S.DIO	HSC277TRF-E		
D2	1750001790	S.DIO	1SS390 TE61	T	108.6/9.8
Eqv.	1750002480	S.DIO	1SS390 <KMC>		
Eqv.	1750000571	S.DIO	1SS381(TPH3F)		
Eqv.	1750001700	S.DIO	HSC277TRF-E		
D3	1750001810	S.DIO	L1SS400T1G <SLVJ>	B	55.4/20.0
D4	1750001810	S.DIO	L1SS400T1G <SLVJ>	B	33.1/30.0
D5	1750001790	S.DIO	1SS390 TE61	T	99.7/7.7
Eqv.	1750002480	S.DIO	1SS390 <KMC>		
Eqv.	1750000571	S.DIO	1SS381(TPH3F)		
Eqv.	1750001700	S.DIO	HSC277TRF-E		
D6	1750001790	S.DIO	1SS390 TE61	T	99.7/10.2
Eqv.	1750002480	S.DIO	1SS390 <KMC>		
Eqv.	1750000571	S.DIO	1SS381(TPH3F)		
Eqv.	1750001700	S.DIO	HSC277TRF-E		
D7	1750000721	S.VAR	HVC375BTRF-E	B	43.1/15.8
D8	1750000721	S.VAR	HVC375BTRF-E	B	44.9/13.6
D9	1750001570	S.VAR	HVL355CMKRF-E	B	41.5/13.4
D10	1750000721	S.VAR	HVC375BTRF-E	B	43.4/20.2
D11	1750000721	S.VAR	HVC375BTRF-E	B	43.9/18.4
D12	1750001910	S.DIO	HVD144AKRF-E	B	45.3/29.1
D13	1750001910	S.DIO	HVD144AKRF-E	B	43.7/29.8
D16	1790001950	S.VAR	VC060318A400RP	T	37.0/67.9
D17	1750001820	S.DIO	LRB706F-40T1G <SLVJ>	B	85.2/9.1
Eqv.	1750000370	S.DIO	DA221 TL		
D19	1710001300	DIO	P6KA18AHE3/54 <TOMEN>		
D22	1750000711	S.VAR	HVC350BTRF-E	B	95.0/20.4
D23	1750000711	S.VAR	HVC350BTRF-E	B	112.4/20.8
D24	1750002190	S.DIO	JDP2S12CR(TE85LQ)	T	101.2/36.2
D25	1750002190	S.DIO	JDP2S12CR(TE85LQ)	T	101.2/34.1
D26	1750001810	S.DIO	L1SS400T1G <SLVJ>	B	109.6/25.1
D27	1750001820	S.DIO	LRB706F-40T1G <SLVJ>	B	104.9/43.4
Eqv.	1750000370	S.DIO	DA221 TL		
D28	1750001810	S.DIO	L1SS400T1G <SLVJ>	T	108.0/20.4
D29	1710000871	S.DIO	HVU131TRF-E	T	112.9/22.7
D30	1710000871	S.DIO	HVU131TRF-E	T	113.3/32.5
D31	1710000871	S.DIO	HVU131TRF-E	T	113.3/30.8
D32	1710000871	S.DIO	HVU131TRF-E	T	113.3/29.0
D33	1750001820	S.DIO	LRB706F-40T1G <SLVJ>	B	99.5/47.1
Eqv.	1750000370	S.DIO	DA221 TL		
D34	1750001780	S.VAR	HVB350BYPTL-E	B	90.5/20.0
D35	1750001810	S.DIO	L1SS400T1G <SLVJ>	T	99.8/22.5
FI1	2020002380	CER	LT450FW <JJE>		
FI2	2020002510	CER	LTW450HT <JJE>		
FI3	2030000870	S.MON	MFT46.3P3 46.350 MHz (FL-442)	B	80.6/14.0

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
X1	6050012830	S.XTA	CR-875 TTS14VSB-A3 15.3 MHz	T	64.7/14.0
X2	6070000300	S.DIS	JTBM450CX24 <JJE>	T	93.5/5.2
L2	6200012170	S.COI	MLG1608S R18J-T	T	93.2/14.8
L3	6200013740	S.COI	MLG1608S R47J-T	B	44.9/16.1
L4	6200013740	S.COI	MLG1608S R47J-T	B	45.2/19.8
L5	6200011050	S.COI	C2012C-R12G-A	B	39.8/14.5
L6	6200009890	S.COI	C2012C-82NG-A	B	41.1/19.1
L7	6200011031	S.COI	ELJRF R10JFB	B	36.9/26.1
L9	6190002030	S.COI	MLG1608S 1R0J-T	B	43.8/26.3
L11	6200007871	S.COI	ELJRF 39NJFB	B	44.3/28.4
L12	6200011011	S.COI	ELJRF 68NJFB	T	21.5/47.0
L13	6200007891	S.COI	ELJRF 27NJFB	T	26.4/52.4
L14	6200013100	S.COI	0.45-1.5-5TL 18.3N <COMO>	T	35.4/61.0
L15	6190002030	S.COI	MLG1608S 1R0J-T	B	88.7/12.9
L22	6200011031	S.COI	ELJRF R10JFB	B	81.6/23.9
L23	6200012860	S.COI	0.20-0.7-4TR 6.5N <COMO>	B	44.7/51.6
L24	6200012860	S.COI	0.20-0.7-4TR 6.5N <COMO>	B	44.7/57.9
L25	6200011090	S.COI	C2012C-R56J-A	B	77.9/20.3
L26	6200010160	S.COI	AS080440-22N	T	80.6/60.2
L27	6200009890	S.COI	C2012C-82NG-A	T	89.4/21.7
L28	6200009890	S.COI	C2012C-82NG-A	T	92.7/21.7
L29	6110004080	COI	LA-630		
L30	6200009930	S.COI	C2012C-68NG-A	T	97.5/22.4
L31	6200010150	S.COI	AS080340-15N	T	89.6/48.3
L32	6200009920	S.COI	C2012C-R10G-A	B	108.7/23.4
L33	6200010420	S.COI	FHW1210HC 1R0JGT <JJE>	T	90.5/35.3
L34	6200012460	S.COI	0.30-1.7-8TL 54N <COMO>	T	111.2/19.7
L36	6200010050	S.COI	AS080547-47N	B	110.0/37.2
L37	6200012760	S.COI	0.35-1.6-7TL 37.5N <COMO>	T	111.5/26.3
L38	6200007370	S.COI	ELJFC R82K-F	B	100.8/44.5
L39	6200010050	S.COI	AS080547-47N	B	110.1/45.7
L40	6200010060	S.COI	AS080647-56N	T	108.5/36.2
L41	6200010060	S.COI	AS080647-56N	B	107.9/52.5
L42	6200010060	S.COI	AS080647-56N	B	107.0/58.8
R2	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	59.0/10.4
R4	7030007310	S.RES	ERJ2GEJ 155 X (1.5M)	T	68.7/16.1
R5	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	68.7/15.2
R6	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	68.7/12.8
R7	7030005160	S.RES	ERJ2GEJ 105 X (1M)	T	68.2/14.0
R9	7030006610	S.RES	ERJ2GEJ 394 X (390K)	T	66.3/16.9
R10	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	16.7/28.5
R11	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	88.4/11.8
R12	7030007060	S.RES	ERJ2GEJ 684X (680K)	T	87.9/16.5
R13	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	13.8/33.8
R14	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	13.8/32.2
R16	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	60.3/15.6
R17	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	102.2/9.1
R22	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	110.3/9.5
R23	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	106.8/9.1
R25	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	32.1/29.3
R26	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	57.0/20.1
R27	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	30.3/13.3
R28	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	98.6/6.2
R29	7030007310	S.RES	ERJ2GEJ 155 X (1.5M)	B	53.7/20.1
R31	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	99.1/13.0
R32	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	99.9/1.5
R33	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	98.2/9.3
R34	7410001220	S.ARR	EXB28V103JX	B	62.3/18.4
R36	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	31.8/19.5
R37	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	98.9/8.1
R38	7030005030	S.RES	ERJ2GEJ 152 X (1.5K)	T	100.0/13.2
R39	7030008410	S.RES	ERJ2GEJ 392 X (3.9K)	B	97.2/6.2
R40	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	99.2/5.3
R41	7030005000	S.RES	ERJ2GEJ 471 X (470)	B	93.3/7.7
R43	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	43.3/7.7
R44	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	53.8/17.1
R46	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	57.1/14.8
R47	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	90.8/6.5
R48	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	52.2/17.1
R49	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	90.7/10.2
R50	7030004990	S.RES	ERJ2GEJ 221 X (220)	T	52.2/18.0
R51	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	59.1/13.3
R53	7030004990	S.RES	ERJ2GEJ 221 X (220)	B	89.5/10.1
R54	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	58.3/20.3
R55	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	49.7/17.5
R56	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	55.0/13.5
R57	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	91.2/9.0
R58	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	46.1/12.7
R59	7030005060	S.RES	ERJ2GEJ 333 X (33K)	T	47.3/13.2
R60	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	46.8/18.4
R61	7030005310	S.RES	ERJ2GEJ 124 X (120K)	T	44.5/17.6
R62	7030007340	S.RES	ERJ2GEJ 153 X (15K)	T	44.1/16.4
R63	7030012260	S.RES	ERJ2RKD 4703X (470K)	T	45.7/14.1
R64	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	42.4/14.2
R65	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	74.6/8.2
R66	7030009280	S.RES	ERJ2GEJ 391 X	B	34.0/17.6
R67	7030007350	S.RES	ERJ2GEJ 393 X (39K)	B	36.6/13.7
R68	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	36.6/15.3
R69	7030008260	S.RES	RR0510P-393-D (39K)	B	38.0/19.0
R70	7030005820	S.RES	RR0510P-103-D (10K)	B	38.0/20.6
R71	7030009270	S.RES	ERJ2GEJ 821 X (820)	B	32.8/13.4
R72	7030005000	S.RES	ERJ2GEJ 471 X (470)	T	73.3/8.6
R73	7030009270	S.RES	ERJ2GEJ 821 X (820)	B	36.7/18.0
R74	7030009280	S.RES	ERJ2GEJ 391 X	B	34.2/22.0
R76	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	36.0/25.2
R78	7030007270	S.RES	ERJ2GEJ 151 X (150)	B	36.0/26.8
R79	7030009290	S.RES	ERJ2GEJ 562 X (5.6K)	T	76.6/8.0
R80	7030009290	S.RES	ERJ2GEJ 562 X (5.6K)	T	76.6/6.4
R84	7030005580	S.RES	ERJ2GEJ 560 X (56)	B	38.7/26.1
R85	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	25.5/5.0
R86	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	44.8/30.8

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
R87	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	T	21.7/39.2
R88	7030005710	S.RES	ERJ2GEJ 121 X (120)	T	23.2/40.8
R89	7030004970	S.RES	ERJ2GEJ 470 X (47)	T	22.0/41.3
R90	7030005230	S.RES	ERJ2GEJ 334 X (330K)	B	18.8/2.9
R91	7030005710	S.RES	ERJ2GEJ 121 X (120)	T	23.2/41.7
R92	7030005600	S.RES	ERJ2GEJ 273 X (27K)	B	24.4/4.1
R93	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	19.2/4.1
R94	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	T	20.4/43.6
R96	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	21.9/49.2
R97	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	T	20.9/44.8
R98	7030009160	S.RES	ERJ2GEJ 181 X (180)	T	24.7/44.5
R99	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	33.9/49.2
R100	7030005060	S.RES	ERJ2GEJ 333 X (33K)	T	33.9/47.4
R102	7030005590	S.RES	ERJ2GEJ 680 X (68)	T	32.9/46.5
R105	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	21.4/41.6
R106	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	33.9/50.1
R108	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	26.4/51.5
R109	7030005060	S.RES	ERJ2GEJ 333 X (33K)	T	34.3/53.1
R110	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	22.1/49.0
R111	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	19.0/56.2
R112	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	19.8/41.5
R114	7030007250	S.RES	ERJ2GEJ 220 X (22)	T	33.4/53.1
R115	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	78.0/24.2
R116	7030005000	S.RES	ERJ2GEJ 471 X (470)	B	88.3/10.8
R117	7030000100	S.RES	MCR10EZHJ 4.7 (4R7)	B	9.6/23.2
R118	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	86.2/11.9
R119	7030010090	S.RES	ERJ2GEJ 180 X (18)	B	46.2/28.8
R120	7030005590	S.RES	ERJ2GEJ 680 X (68)	B	46.7/30.0
R121	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	13.9/62.0
R122	7030008370	S.RES	ERJ2GEJ 561 X (560)	B	83.2/9.0
R124	7030010090	S.RES	ERJ2GEJ 180 X (18)	B	47.1/28.8
R125	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	72.5/23.3
R126	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	77.8/18.3
R127	7030004970	S.RES	ERJ2GEJ 470 X (47)	B	85.2/23.6
R128	7030000180	S.RES	MCR10EZHJ 22 (220)	T	48.7/50.9
R129	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/50.1
R130	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/59.3
R131	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	80.4/21.0
R132	7030000180	S.RES	MCR10EZHJ 22 (220)	T	48.7/58.6
R133	7030005590	S.RES	ERJ2GEJ 680 X (68)	B	83.3/19.5
R134	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	50.0/60.6
R135	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	50.0/49.0
R136	7030005100	S.RES	ERJ2GEJ 154 X (150K)	B	84.3/22.7
R137	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	84.3/21.1
R138	7030005310	S.RES	ERJ2GEJ 124 X (120K)	B	85.2/21.9
R139	7030005080	S.RES	ERJ2GEJ 823 X (82K)	B	87.3/21.6
R144	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	T	79.0/22.3
R145	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	88.7/20.6
R146	7520000241	S.POS	PRF18BC471QB5RB	T	66.0/45.4
R147	7030005170	S.RES	ERJ2GEJ 474 X (470K)	T	73.4/24.9
R149	7030010040	S.RES	ERJ2GEJ-JPW	T	71.0/26.2
R150	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	77.4/23.2
R152	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	92.2/20.6
R153	7030008410	S.RES	ERJ2GEJ 392 X (3.9K)	T	71.6/24.7
R156	7030012710	S.RES	ERA2AEB 273X (27K)	T	80.1/32.7
R157	7030012160	S.RES	ERJM1WSF6M0U	T	71.1/66.8
R159	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	96.1/20.8
R160	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	83.5/24.9
R161	7030004970	S.RES	ERJ2GEJ 470 X (47)	B	97.9/23.6
R162	7030008370	S.RES	ERJ2GEJ 561 X (560)	B	100.1/22.4
R163	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	82.3/24.4
R164	7030004980	S.RES	ERJ2GEJ 101 X (100)	B	101.3/20.5
R165	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	83.2/23.7
R166	7030012260	S.RES	ERJ2RKD 4703X (470K)	T	81.3/29.7
R167	7030012310	S.RES	ERJ2RKD 3303X (330K)	T	82.5/30.2
R169	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	105.8/20.4
R170	7030012260	S.RES	ERJ2RKD 4703X (470K)	T	84.3/28.5
R173	7030008290	S.RES	ERJ2GEJ 183 X (18K)	B	106.3/21.6
R174	7030012700	S.RES	ERA2AEB 392X (3.9K)	T	78.9/29.7
R175	7030012700	S.RES	ERA2AEB 392X (3.9K)	T	83.4/27.6
R176	7030010040	S.RES	ERJ2GEJ-JPW	T	85.5/29.7
R177	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	105.1/22.6
R178	7030005310	S.RES	ERJ2GEJ 124 X (120K)	B	104.2/22.6
R179	7030012710	S.RES	ERA2AEB 273X (27K)	T	85.2/28.5
R180	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	70.4/24.3
R181	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	83.5/25.8
R182	7030006070	S.RES	ERJ12YJ101U (100)	T	85.4/35.2
R183	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	110.8/19.9
R184	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	T	68.7/23.4
R185	7030008010	S.RES	ERJ2GEJ 123 X (12K)	B	111.6/25.1
R186	7030005210	S.RES	ERJ2GEJ 822 X (8.2K)	B	103.5/45.2
R187	7030005210	S.RES	ERJ2GEJ 822 X (8.2K)	B	102.3/46.3
R188	7030005080	S.RES	ERJ2GEJ 823 X (82K)	B	112.2/62.6
R189	7030007250	S.RES	ERJ2GEJ 220 X (22)	B	51.7/15.5
R191	7030008410	S.RES	ERJ2GEJ 392 X (3.9K)	B	98.1/3.2
R192	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	98.3/2.4
R195	7030008240	S.RES	ERJ12Y0R00U	T	37.7/56.1
R196	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/51.3
R197	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/58.1
R198	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	106.3/22.5
R199	7030007350	S.RES	ERJ2GEJ 393 X (39K)	T	47.5/61.8
R200	7030007350	S.RES	ERJ2GEJ 393 X (39K)	T	47.5/47.6
R201	7030010040	S.RES	ERJ2GEJ-JPW	T	51.4/43.6
R202	7030010040	S.RES	ERJ2GEJ-JPW	B	78.0/23.3
R204	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	75.6/8.2
R206	7030012260	S.RES	ERJ2RKD 4703X (470K)	B	18.6/41.0
R207	7030012270	S.RES	ERJ2RKD 1203X (120K)	B	18.6/39.4
R208	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	40.7/5.9
R209	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	27.5/6.5
R210	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	25.7/11.3
R211	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	29.5/8.4
R212	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	21.4/40.7
R213	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	21.2/49.0
R214	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	21.5/48.0
R215	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	22.8/25.4

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
R216	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	19.4/21.5
R217	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	23.3/22.2
R218	7030000100	S.RES	MCR10EZHJ 4.7 (4R7)	B	14.3/18.9
R220	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	95.9/10.2
R225	7030010040	S.RES	ERJ2GEJ-JPW	T	75.4/29.7
R230	7030010040	S.RES	ERJ2GEJ-JPW	B	38.8/24.5
R231	7030005580	S.RES	ERJ2GEJ 560 X (56)	B	38.2/27.7
R233	7030007340	S.RES	ERJ2GEJ 153 X (15K)	T	71.5/9.0
R234	7030005600	S.RES	ERJ2GEJ 273 X (27K)	B	24.3/5.6
R235	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	64.8/44.3
C2	4030017460	S.CER	C1005 JB 1H 102K-T	B	53.8/8.3
C3	4030020000	S.CER	C1005 JB 1A 105K-T	T	70.0/14.0
C4	4030020000	S.CER	C1005 JB 1A 105K-T	T	69.1/14.0
C8	4030019990	S.CER	C1005 JB 1C 104K-T	T	65.5/11.1
C9	4030017430	S.CER	C1005 CH 1H 101J-T	T	86.3/16.5
C10	4030017460	S.CER	C1005 JB 1H 102K-T	B	10.6/34.3
C11	4030019990	S.CER	C1005 JB 1C 104K-T	B	15.5/28.9
C12	4030016790	S.CER	C1005 JB 1E 103K-T	T	87.9/10.6
C13	4030017460	S.CER	C1005 JB 1H 102K-T	T	61.2/12.9
C14	4030017380	S.CER	C1005 CH 1H 050B-T	T	91.4/14.3
C15	4030019560	S.CER	GRM21BB31C106KE15L	B	18.4/34.8
C16	4030016790	S.CER	C1005 JB 1E 103K-T	T	87.9/13.0
C17	4030017580	S.CER	C1005 CH 1H 060C-T	T	91.9/15.5
C18	4030017500	S.CER	C1005 CH 1H 560J-T	T	94.3/14.3
C19	4030016790	S.CER	C1005 JB 1E 103K-T	B	66.8/8.3
C21	4030017620	S.CER	C1005 CH 1H 100C-T	T	61.2/15.6
C22	4030017460	S.CER	C1005 JB 1H 102K-T	B	53.3/5.3
C23	4030017460	S.CER	C1005 JB 1H 102K-T	B	68.3/5.3
C24	4030017460	S.CER	C1005 JB 1H 102K-T	B	56.1/13.2
C26	4030017360	S.CER	C1005 CH 1H 030B-T	T	94.6/15.5
C27	4030017460	S.CER	C1005 JB 1H 102K-T	B	61.8/8.3
C29	4030016930	S.CER	C1005 JB 1A 104K-T	B	40.9/7.7
C30	4030016950	S.CER	C1005 JB 1A 473K-T	T	111.5/9.1
C31	4030017460	S.CER	C1005 JB 1H 102K-T	B	65.8/5.3
C33	4030017460	S.CER	C1005 JB 1H 102K-T	B	55.8/5.3
C34	4030017460	S.CER	C1005 JB 1H 102K-T	B	31.2/29.3
C35	4030017730	S.CER	C1005 JB 1H 471K-T	B	54.6/21.4
C36	4030017460	S.CER	C1005 JB 1H 102K-T	B	51.7/17.1
C37	4030017420	S.CER	C1005 CH 1H 470J-T	B	55.8/21.0
C39	4030019990	S.CER	C1005 JB 1C 104K-T	B	50.5/16.0
C40	4030017460	S.CER	C1005 JB 1H 102K-T	B	29.4/13.3
C41	4030019990	S.CER	C1005 JB 1C 104K-T	B	60.5/20.1
C42	4510009950	S.ELE	EEEHC1C470P	T	29.6/32.5
C43	4030020000	S.CER	C1005 JB 1A 105K-T	B	51.7/13.9
C45	4030017460	S.CER	C1005 JB 1H 102K-T	B	37.1/30.8
C46	4030020000	S.CER	C1005 JB 1A 105K-T	B	50.5/15.1
C49	4030019990	S.CER	C1005 JB 1C 104K-T	T	102.2/10.0
C50	4030019990	S.CER	C1005 JB 1C 104K-T	T	98.6/10.5
C51	4030019990	S.CER	C1005 JB 1C 104K-T	B	97.1/8.1
C52	4030017720	S.CER	C1005 JB 1H 331K-T	B	99.3/6.9
C53	4030017720	S.CER	C1005 JB 1H 331K-T	B	98.4/6.9
C54	4030016790	S.CER	C1005 JB 1E 103K-T	B	98.2/15.1
C55	4030019560	S.CER	GRM21BB31C106KE15L	T	91.6/10.7
C56	4030020000	S.CER	C1005 JB 1A 105K-T	B	99.1/15.1
C57	4030017460	S.CER	C1005 JB 1H 102K-T	T	90.0/10.1
C58	4030017460	S.CER	C1005 JB 1H 102K-T	B	93.7/6.5
C59	4030017460	S.CER	C1005 JB 1H 102K-T	T	57.1/15.7
C60	4030017460	S.CER	C1005 JB 1H 102K-T	B	94.2/7.7
C61	4030019990	S.CER	C1005 JB 1C 104K-T	B	87.3/6.5
C62	4030017460	S.CER	C1005 JB 1H 102K-T	B	91.6/12.6
C63	4030019990	S.CER	C1005 JB 1C 104K-T	T	56.3/19.8
C64	4030017460	S.CER	C1005 JB 1H 102K-T	B	97.0/14.7
C65	4030019990	S.CER	C1005 JB 1C 104K-T	T	58.3/15.3
C66	4030019990	S.CER	C1005 JB 1C 104K-T	B	91.3/7.7
C67	4550000530	S.TAN	TEESVA 1V 104M8R [TPE]	T	53.5/14.1
Eqv.	4550008210	S.TAN	267M3502 104MR [TPE]		
C67	4550008210	S.TAN	267M3502 104MR [USA]	T	53.5/14.1
Eqv.	4550000530	S.TAN	TEESVA 1V 104M8R [USA]		
C67	4550000530	S.TAN	TEESVA 1V 104M8R [KOR]	T	53.5/14.1
Eqv.	4550008210	S.TAN	267M3502 104MR [KOR]		
C67	4550008210	S.TAN	267M3502 104MR [EXP-01]	T	53.5/14.1
Eqv.	4550000530	S.TAN	TEESVA 1V 104M8R [EXP-01]		
C67	4550000530	S.TAN	TEESVA 1V 104M8R [EXP-02]	T	53.5/14.1
Eqv.	4550008210	S.TAN	267M3502 104MR [EXP-02]		
C68	4030017460	S.CER	C1005 JB 1H 102K-T	T	59.1/12.4
C69	4030017430	S.CER	C1005 CH 1H 101J-T	B	91.6/10.2
C70	4030017040	S.CER	C1005 JB 1A 333K-T	T	95.9/11.1
C71	4030017460	S.CER	C1005 JB 1H 102K-T	T	58.3/19.4
C74	4550002890	S.TAN	TEESVA 1A 225M8R	T	49.3/14.1
Eqv.	4550007400	S.TAN	F931A225MAABMA		
C75	4030017460	S.CER	C1005 JB 1H 102K-T	T	47.3/12.3
C76	4030017420	S.CER	C1005 CH 1H 470J-T	T	43.6/17.6
C77	4030017460	S.CER	C1005 JB 1H 102K-T	T	47.3/14.1
C78	4030017420	S.CER	C1005 CH 1H 470J-T	B	47.1/19.4
C79	4030020000	S.CER	C1005 JB 1A 105K-T	T	44.5/15.2
C80	4550000560	S.TAN	TEESVA 1V 334M8R [TPE]	B	46.6/14.9
Eqv.	4550007550	S.TAN	F931V334MAABMA [TPE]		
C80	4550007550	S.TAN	F931V334MAABMA [USA]	B	46.6/14.9
Eqv.	4550000560	S.TAN	TEESVA 1V 334M8R [USA]		
C80	4550000560	S.TAN	TEESVA 1V 334M8R [KOR]	B	46.6/14.9
Eqv.	4550007550	S.TAN	F931V334MAABMA [KOR]		
C80	4550007550	S.TAN	F931V334MAABMA [EXP-01]	B	46.6/14.9
Eqv.	4550000560	S.TAN	TEESVA 1V 334M8R [EXP-01]		
C80	4550000560	S.TAN	TEESVA 1V 334M8R [EXP-02]	B	46.6/14.9
Eqv.	4550007550	S.TAN	F931V334MAABMA [EXP-02]		
C81	4030016790	S.CER	C1005 JB 1E 103K-T	B	91.0/13.8
C82	4030017460	S.CER	C1005 JB 1H 102K-T	B	13.0/29.4
C83	4030017440	S.CER	C1005 CH 1H 221J-T	T	44.5/13.6
C85	4030017750	S.CER	C1005 JB 1H 122K-T	B	43.3/13.2
C86	4030017530	S.CER	C1005 CH 1H 0R5B-T	B	41.4/15.1
C87	4030017460	S.CER	C1005 JB 1H 102K-T	B	34.0/18.5
C88	4030017580	S.CER	C1005 CH 1H 060C-T	B	39.2/20.2
C89	4030017580	S.CER	C1005 CH 1H 060C-T	B	37.9/14.8

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REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C90	4030017460	S.CER	C1005 JB 1H 102K-T	B	92.4/7.0
C91	4030016930	S.CER	C1005 JB 1A 104K-T	T	73.4/16.9
C92	4030019990	S.CER	C1005 JB 1C 104K-T	B	33.0/23.3
C93	4030017590	S.CER	C1005 CH 1H 070C-T	B	34.9/13.8
C94	4030017420	S.CER	C1005 CH 1H 470J-T	B	33.7/13.4
C95	4030017380	S.CER	C1005 CH 1H 050B-T	B	36.3/19.2
C96	4030018010	S.CER	C1005 CH 1H 360J-T	B	35.8/18.0
C97	4030016790	S.CER	C1005 JB 1E 103K-T	T	72.8/7.4
C98	4030016930	S.CER	C1005 JB 1A 104K-T	T	75.7/17.3
C99	4030017460	S.CER	C1005 JB 1H 102K-T	B	37.9/15.7
C100	4030017460	S.CER	C1005 JB 1H 102K-T	B	39.2/21.1
C101	4030017540	S.CER	C1005 CH 1H R75B-T	B	34.5/20.6
C102	4030019990	S.CER	C1005 JB 1C 104K-T	B	37.0/16.6
C103	4030017460	S.CER	C1005 JB 1H 102K-T	B	34.2/22.9
C104	4030017540	S.CER	C1005 CH 1H R75B-T	B	33.1/15.3
C105	4030017460	S.CER	C1005 JB 1H 102K-T	B	32.5/25.2
C106	4030017460	S.CER	C1005 JB 1H 102K-T	B	40.0/22.7
C112	4030017460	S.CER	C1005 JB 1H 102K-T	B	46.9/25.9
C113	4030017460	S.CER	C1005 JB 1H 102K-T	B	39.4/28.0
C116	4030019560	S.CER	GRM21BB31C106KE15L	T	78.0/6.1
C117	4030017460	S.CER	C1005 JB 1H 102K-T	B	42.7/26.6
C120	4030017460	S.CER	C1005 JB 1H 102K-T	T	75.6/6.6
C122	4030017630	S.CER	C1005 CH 1H 120J-T	B	43.1/28.0
C123	4030017630	S.CER	C1005 CH 1H 120J-T	B	43.1/28.9
C124	4030017460	S.CER	C1005 JB 1H 102K-T	B	16.8/37.1
C125	4030017460	S.CER	C1005 JB 1H 102K-T	B	44.8/26.8
C126	4510010010	S.ELE	25 CE 220 LX	T	9.5/34.2
C127	4030017460	S.CER	C1005 JB 1H 102K-T	T	20.5/39.6
C128	4030017460	S.CER	C1005 JB 1H 102K-T	T	22.9/39.6
C129	4510010010	S.ELE	25 CE 220 LX	T	18.8/34.2
C130	4030017460	S.CER	C1005 JB 1H 102K-T	B	16.8/40.0
C131	4030017460	S.CER	C1005 JB 1H 102K-T	B	25.5/2.4
C132	4030017460	S.CER	C1005 JB 1H 102K-T	B	17.7/40.0
C134	4030017650	S.CER	C1005 CH 1H 270J-T	T	22.0/42.9
C135	4030018900	S.CER	C1005 JB 0J 474K-T	B	18.3/4.1
C137	4030017460	S.CER	C1005 JB 1H 102K-T	T	36.0/49.8
C138	4030017460	S.CER	C1005 JB 1H 102K-T	T	19.8/49.6
C139	4030017460	S.CER	C1005 JB 1H 102K-T	T	24.7/43.6
C140	4030017780	S.CER	C1005 JB 1H 472K-T	B	23.2/4.3
C141	4030018900	S.CER	C1005 JB 0J 474K-T	B	22.7/3.1
C142	4030017430	S.CER	C1005 CH 1H 101J-T	T	23.1/47.0
C143	4030017420	S.CER	C1005 CH 1H 470J-T	B	36.3/50.7
C144	4030017730	S.CER	C1005 JB 1H 471K-T	B	21.1/6.4
C145	4030016790	S.CER	C1005 JB 1E 103K-T	T	33.9/48.3
C148	4030017460	S.CER	C1005 JB 1H 102K-T	T	34.1/46.2
C149	4030016930	S.CER	C1005 JB 1A 104K-T	T	73.7/22.8
C150	4510010010	S.ELE	25 CE 220 LX	T	32.0/14.5
C151	4030017460	S.CER	C1005 JB 1H 102K-T	B	22.7/46.2
C152	4030017460	S.CER	C1005 JB 1H 102K-T	T	23.2/51.5
C156	4030017460	S.CER	C1005 JB 1H 102K-T	B	13.3/42.7
C157	4030017460	S.CER	C1005 JB 1H 102K-T	B	85.2/25.2
C159	4030017420	S.CER	C1005 CH 1H 470J-T	T	33.9/51.0
C160	4030017430	S.CER	C1005 CH 1H 101J-T	T	27.7/52.0
C161	4030017460	S.CER	C1005 JB 1H 102K-T	T	25.1/50.3
C162	4030019990	S.CER	C1005 JB 1C 104K-T	B	88.6/14.6
C163	4030017460	S.CER	C1005 JB 1H 102K-T	T	33.9/51.9
C164	4510010230	S.ELE	10 CE 1000 LX	T	12.6/23.5
C165	4030019560	S.CER	GRM21BB31C106KE15L	B	13.6/44.1
C166	4030017460	S.CER	C1005 JB 1H 102K-T	B	87.1/10.3
C167	4030017600	S.CER	C1005 CH 1H 080C-T	B	87.4/11.6
C170	4030019990	S.CER	C1005 JB 1C 104K-T	B	7.9/22.2
C171	4030017460	S.CER	C1005 JB 1H 102K-T	B	46.7/30.9
C172	4030017460	S.CER	C1005 JB 1H 102K-T	T	36.9/66.9
C174	4030016790	S.CER	C1005 JB 1E 103K-T	B	86.3/15.4
C175	4030016790	S.CER	C1005 JB 1E 103K-T	B	85.5/11.0
C177	4030017460	S.CER	C1005 JB 1H 102K-T	B	14.6/48.5
C178	4030017460	S.CER	C1005 JB 1H 102K-T	T	13.1/51.5
C179	4030017460	S.CER	C1005 JB 1H 102K-T	T	37.9/62.1
C182	4030017730	S.CER	C1005 JB 1H 471K-T	T	17.3/52.2
C184	4030017460	S.CER	C1005 JB 1H 102K-T	T	17.3/53.1
C187	4030017580	S.CER	C1005 CH 1H 060C-T	B	84.3/15.3
C189	4030007130	S.CER	C1608 CH 1H 101J-T	B	40.5/52.1
C190	4030007130	S.CER	C1608 CH 1H 101J-T	B	40.5/57.2
C191	4030017370	S.CER	C1005 CH 1H 3R5B-T	B	80.4/23.3
C192	4030009980	S.CER	C1608 JB 1H 152K-T	B	45.6/53.9
C193	4030009980	S.CER	C1608 JB 1H 152K-T	B	45.6/55.5
C194	4030016790	S.CER	C1005 JB 1E 103K-T	B	77.4/16.8
C195	4030017340	S.CER	C1005 CH 1H 010B-T	B	79.8/18.9
C196	4030017460	S.CER	C1005 JB 1H 102K-T	B	77.5/22.4
C197	4030011600	S.CER	C1608 JB 1E 104K-T	T	48.7/48.1
C198	4030016790	S.CER	C1005 JB 1E 103K-T	T	84.1/23.7
C199	4030017390	S.CER	C1005 CH 1H 180J-T	B	79.5/21.0
C200	4030017460	S.CER	C1005 JB 1H 102K-T	B	82.4/19.5
C201	4030007140	S.CER	C1608 CH 1H 121J-T	B	48.9/52.5
C202	4030007140	S.CER	C1608 CH 1H 121J-T	B	48.9/56.9
C204	4030011600	S.CER	C1608 JB 1E 104K-T	T	48.6/61.4
C205	4030017460	S.CER	C1005 JB 1H 102K-T	B	82.8/23.3
C208	4030020220	S.CER	GQM2192C1H470JB01D	B	74.0/43.7
C209	4030017380	S.CER	C1005 CH 1H 050B-T	B	87.3/22.5
C210	4030017460	S.CER	C1005 JB 1H 102K-T	T	51.2/48.6
C211	4030019990	S.CER	C1005 JB 1C 104K-T	T	77.8/22.0
C213	4030017340	S.CER	C1005 CH 1H 010B-T	B	88.5/22.4
C216	4030019410	S.CER	GRM31A7U2J471JW31D	T	75.4/61.7
C217	4030017460	S.CER	C1005 JB 1H 102K-T	T	64.8/42.7
C218	4030020230	S.CER	GQM2192C1H680JB01D	T	74.2/42.8
C219	4030018890	S.CER	C1005 JB 0J 224K-T	T	72.5/24.9
C220	4030017460	S.CER	C1005 JB 1H 102K-T	T	66.3/42.8
C221	4030017460	S.CER	C1005 JB 1H 102K-T	B	88.7/19.0
C222	4030019410	S.CER	GRM31A7U2J471JW31D	T	75.4/59.6
C223	4030020230	S.CER	GQM2192C1H680JB01D	T	74.2/44.5
C224	4030017680	S.CER	C1005 CH 1H 820J-T	B	89.4/22.4
C225	4510010010	S.ELE	25 CE 220 LX	T	81.0/66.9
C226	4030017460	S.CER	C1005 JB 1H 102K-T	T	79.0/23.2
C227	4030017530	S.CER	C1005 CH 1H 0R5B-T	B	90.6/22.9
C228	4030020230	S.CER	GQM2192C1H680JB01D	T	74.2/46.3

Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C229	4030016790	S.CER C1005 JB 1E 103K-T	B	89.8/13.6
C230	4030017460	S.CER C1005 JB 1H 102K-T	T	76.9/22.0
C232	4030016930	S.CER C1005 JB 1A 104K-T	B	91.8/18.1
C234	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/48.0
C236	4030017680	S.CER C1005 CH 1H 820J-T	B	91.8/22.4
C237	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/49.8
C238	4030017340	S.CER C1005 CH 1H 010B-T	B	92.7/22.4
C239	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/51.5
C240	4030017460	S.CER C1005 JB 1H 102K-T	T	77.0/29.7
C241	4030020210	S.CER GQM2192C2A150JB01D	T	74.2/53.3
C242	4030017550	S.CER C1005 CH 1H 1R5B-T	B	94.0/22.9
C243	4030017460	S.CER C1005 JB 1H 102K-T	T	68.2/22.1
C245	4030020200	S.CER GQM2192C2A8R0CB01D	T	74.1/55.0
C247	4030017460	S.CER C1005 JB 1H 102K-T	B	95.6/18.5
C249	4030017680	S.CER C1005 CH 1H 820J-T	B	95.2/22.4
C250	4030017460	S.CER C1005 JB 1H 102K-T	B	96.1/22.4
C251	4030016790	S.CER C1005 JB 1E 103K-T	B	100.4/20.5
C254	4030011240	S.CER GRM31M2C2H470JV01L (GRM42-6 CH)	T	80.2/47.6
C255	4030017460	S.CER C1005 JB 1H 102K-T	T	81.6/31.8
C256	4030017460	S.CER C1005 JB 1H 102K-T	B	102.2/20.5
C257	4030017460	S.CER C1005 JB 1H 102K-T	T	81.3/30.6
C258	4030017460	S.CER C1005 JB 1H 102K-T	B	97.0/22.0
C260	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	95.7/49.8
C261	4030020000	S.CER C1005 JB 1A 105K-T	B	97.9/22.0
C262	4030017460	S.CER C1005 JB 1H 102K-T	B	106.7/20.4
C263	4030017460	S.CER C1005 JB 1H 102K-T	T	82.5/27.6
C265	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	95.7/47.7
C266	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	95.7/45.6
C267	4030017460	S.CER C1005 JB 1H 102K-T	T	80.1/30.2
C269	4030019990	S.CER C1005 JB 1C 104K-T	T	82.3/26.0
C270	4030017640	S.CER C1005 CH 1H 150J-T	B	106.3/23.4
C271	4030017460	S.CER C1005 JB 1H 102K-T	T	78.9/30.6
C272	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	92.1/43.5
C274	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	92.1/41.4
C275	4030017460	S.CER C1005 JB 1H 102K-T	T	86.4/27.9
C276	4030017460	S.CER C1005 JB 1H 102K-T	B	112.0/19.5
C277	4030017460	S.CER C1005 JB 1H 102K-T	T	84.7/26.2
C278	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	92.1/39.3
C279	4030017680	S.CER C1005 CH 1H 820J-T	B	110.8/21.5
C280	4030017460	S.CER C1005 JB 1H 102K-T	T	89.0/37.7
C281	4030018940	S.CER GRM31A7U2J331JW31D	T	98.1/35.9
C282	4030018940	S.CER GRM31A7U2J331JW31D	T	96.0/35.9
C283	4030018940	S.CER GRM31A7U2J331JW31D	T	93.7/35.9
C284	4030017460	S.CER C1005 JB 1H 102K-T	T	68.7/24.3
C285	4030019990	S.CER C1005 JB 1C 104K-T	T	86.4/28.8
C287	4030017380	S.CER C1005 CH 1H 050B-T	B	110.8/23.1
C288	4030019420	S.CER GRM31A7U2J102JW31D	T	104.3/32.0
C291	4030011170	S.CER GRM31M2C2H180JV01L (GRM42-6 CH)	B	104.3/34.6
C292	4030017460	S.CER C1005 JB 1H 102K-T	B	111.2/26.3
C293	4030017550	S.CER C1005 CH 1H 1R5B-T	T	110.2/23.1
C295	4030011020	S.CER GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	109.1/41.9
C296	4030007020	S.CER C1608 CH 1H 120J-T	B	104.7/41.5
C298	4030011230	S.CER GRM31M2C2H390JV01L (GRM42-6 CH)	B	104.3/39.8
C299	4030017460	S.CER C1005 JB 1H 102K-T	B	101.9/42.4
C300	4030011230	S.CER GRM31M2C2H390JV01L (GRM42-6 CH)	B	100.3/51.6
C302	4030017390	S.CER C1005 CH 1H 180J-T	T	108.8/26.9
C303	4030011020	S.CER GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	103.4/47.8
C304	4030007020	S.CER C1608 CH 1H 120J-T	B	99.4/49.4
C305	4030011050	S.CER GRM31M3C2H3R0CY21L (GRM42-6 CJ)	T	98.7/29.9
C306	4030011210	S.CER GRM31M2C2H330JV01L (GRM42-6 CH)	B	100.3/56.9
C307	4030011160	S.CER GRM31M2C2H150JV01L (GRM42-6 CH)	B	104.2/63.1
C308	4030017450	S.CER C1005 JB 1H 271K-T	B	98.6/4.1
C309	4030017460	S.CER C1005 JB 1H 102K-T	T	97.9/1.2
C310	4030019990	S.CER C1005 JB 1C 104K-T	T	108.0/8.8
C311	4030019990	S.CER C1005 JB 1C 104K-T	T	99.7/5.6
C312	4030019990	S.CER C1005 JB 1C 104K-T	T	100.0/11.8
C313	4030019990	S.CER C1005 JB 1C 104K-T	T	111.5/10.0
C314	4030007140	S.CER C1608 CH 1H 121J-T	B	48.9/48.9
C315	4030007140	S.CER C1608 CH 1H 121J-T	B	48.9/60.5
C319	4510010010	S.ELE 25 CE 220 LX	T	22.4/16.6
C321	4030020000	S.CER C1005 JB 1A 105K-T	T	23.2/52.4
C322	4030019990	S.CER C1005 JB 1C 104K-T	B	14.6/16.5
C323	4030011230	S.CER GRM31M2C2H390JV01L (GRM42-6 CH)	T	86.3/45.6
C332	4550007090	S.TAN TEESVA 1A 226M8R	T	68.5/10.7
Eqv.	4550008160	S.TAN F931A226MAA		
C333	4030016970	S.CER C1005 JB 1E 223K-T	B	25.6/3.6
C334	4030019460	S.CER C1608 JB 0J 106M-T	T	71.7/16.4
J1	6510028390	S.CON 04-6294-036-000-800	T	60.0/6.8
J2	6510014961	S.CON B2B-ZR-SM4-TF(LF)(SN)	T	8.9/56.5
J3	6510025940	CON PJ-3047S <XIN>		
W1	8900011882	CAB OPC-1210A-1(P0.5N36L70) <TJM>		
W2	7030012290	JUM RDS2T0R0		
W6	8900015130	CAB OPC-1131A <TJM>		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
EP3	6910018460	S.BEA MMZ1005Y102C-T	T	24.8/51.5
EP4	6910014730	S.BEA MPZ2012S331A-T	T	34.7/64.6
EP5	6910020610	S.BEA BLM15BD102SN1D	B	45.7/26.3

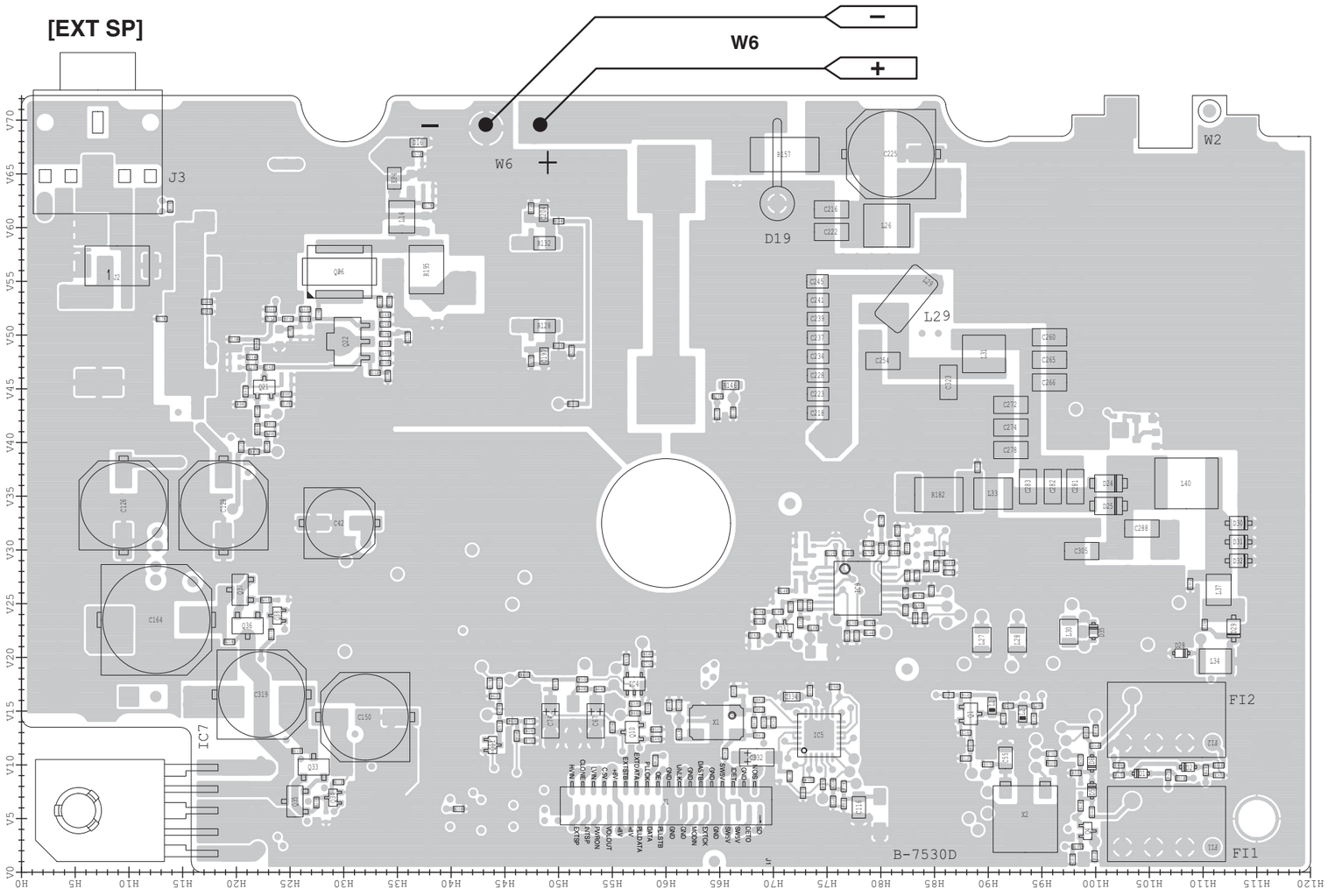
Eqv.= This component is equivalent to the REF No. component listed above, and may be substituted on parts orders and repairs.

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

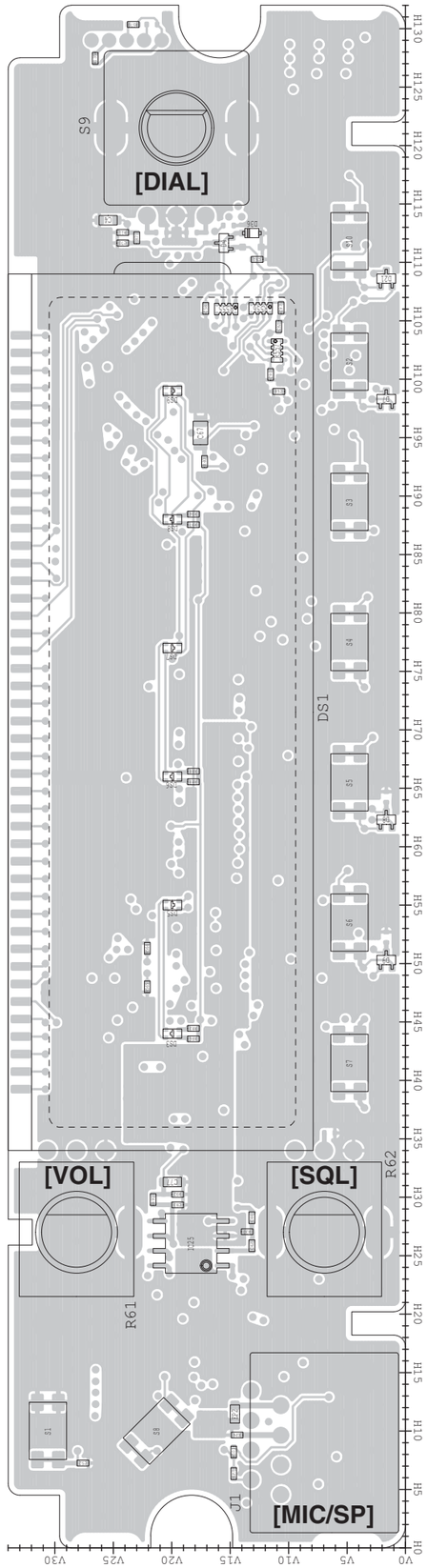
BOARD LAYOUTS

The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• MAIN UNIT (TOP VIEW)

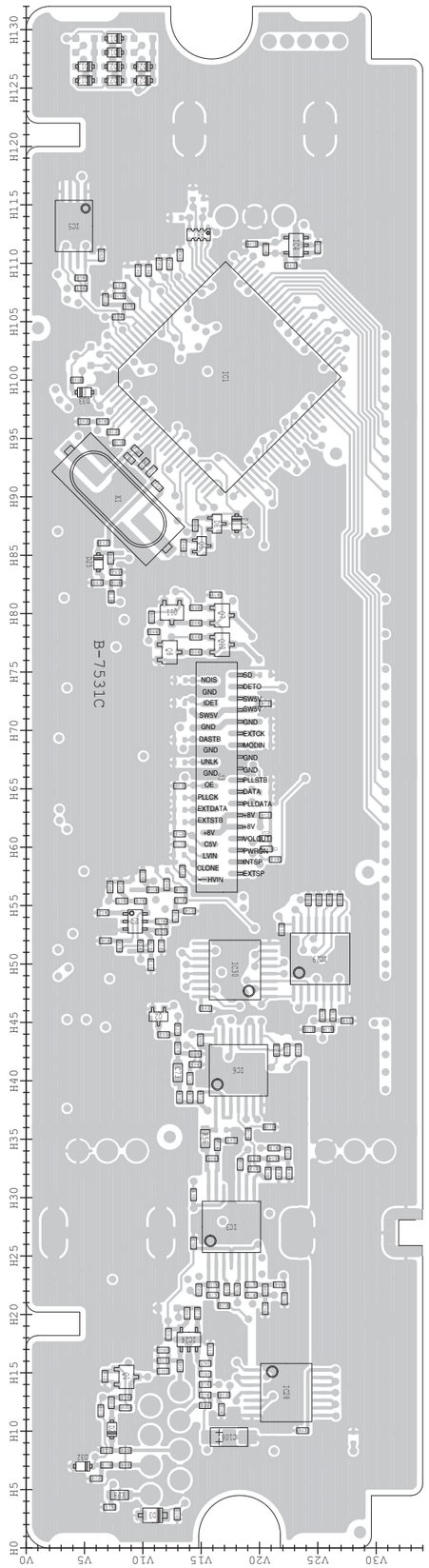


• LOGIC UNIT (TOP VIEW)

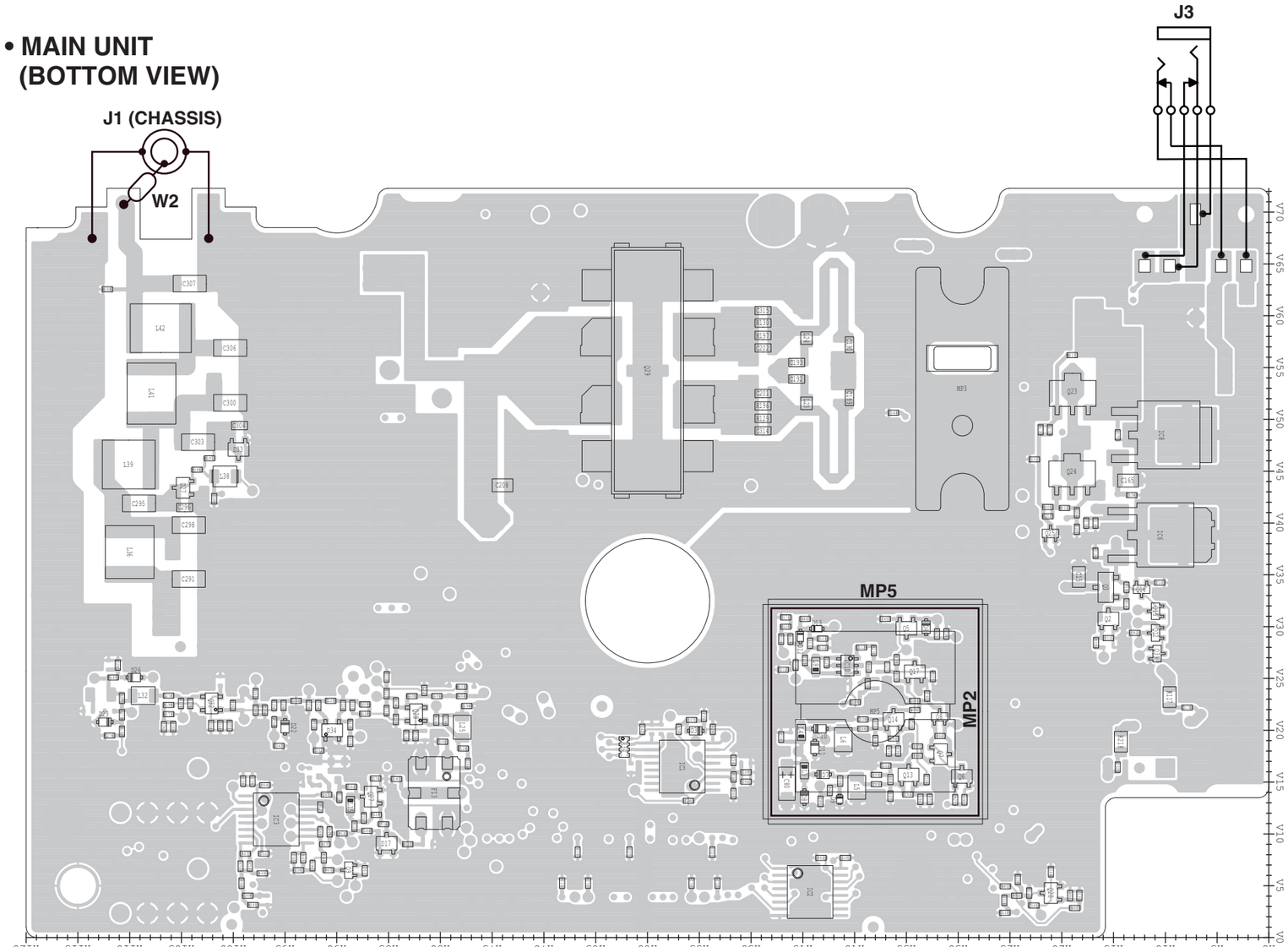


The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• LOGIC UNIT (BOTTOM VIEW)

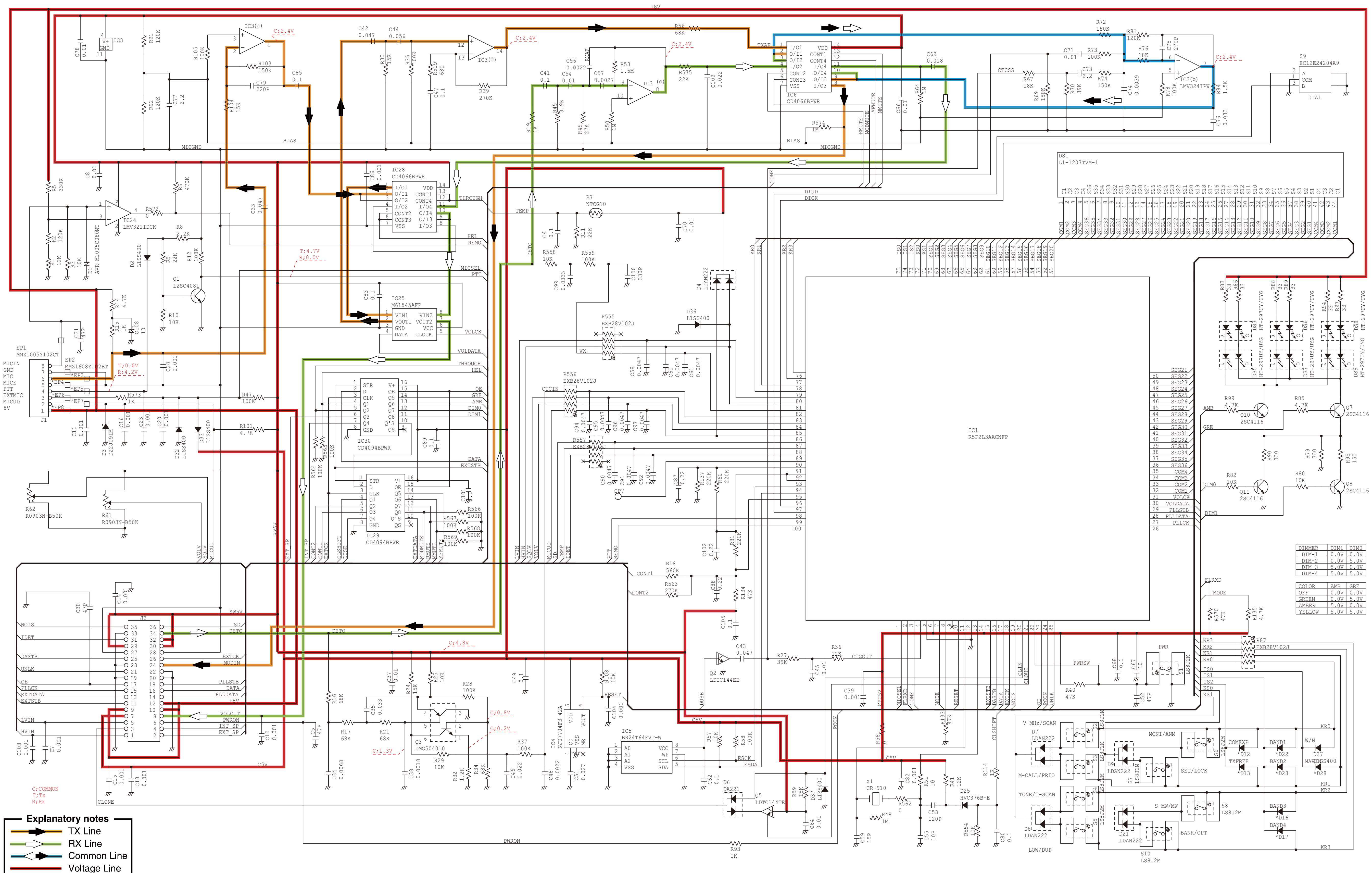


• MAIN UNIT (BOTTOM VIEW)



VOLTAGE DIAGRAM

• LOGIC UNIT



DIMMER	DIM1	DIM0
DIM-1	0.0V	0.0V
DIM-2	0.0V	5.0V
DIM-3	5.0V	0.0V
DIM-4	5.0V	5.0V

COLOR	AMB	GRE
OFF	0.0V	0.0V
GREEN	0.0V	5.0V
AMBER	5.0V	0.0V
YELLOW	5.0V	5.0V

*: Refer to the PARTS LIST for the value and name of component.

ICOM

SERVICE MANUAL

FM TRANSCEIVER

IC-2300H

S-14811XZ-C1
Dec. 2011

Icom Inc.

INTRODUCTION

This service manual describes the latest technical information for the **IC-2300H** FM TRANSCEIVER, at the time of publication.

MODEL	VERSION	TX POWER
IC-2300H	TPE	24 W
	USA	65 W
	KOR	50 W
	EXP-01	65 W
	EXP-02	

CAUTION

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than the specified voltage. This will ruin the transceiver.

DO NOT expose the transceiver to rain, snow or any liquids.

DO NOT reverse the polarities of the power supply when connecting the transceiver.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front-end.

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.



ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit Icom part number
2. Component name
3. Equipment model name and unit name
4. Quantity required

<ORDER EXAMPLE>

1110003491	S.IC	TA31136FNG	IC-2300H	MAIN UNIT	5 pieces
8820001210	Screw	2438 screw	IC-2300H	Top cover	10 pieces

Addresses are provided on the inside back cover for your convenience.

REPAIR NOTES

1. Make sure that the problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool MUST be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a Standard Signal Generator or a Sweep Generator.
7. **ALWAYS** connect a 40 to 60 dB attenuator between the transceiver and a Deviation Meter or Spectrum Analyzer, when using such test equipment.
8. **READ** the instructions of the test equipment throughly before connecting it to the transceiver.

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SECTION 1 SPECIFICATIONS

■ GENERAL

- Frequency coverage : (unit: MHz)
  - USA Tx: 144–148/Rx: 136–174*
  - Export Tx: 136–174*/Rx: 136–174*
  - Taiwan, Korea Tx/Rx: 144–146

  *Guaranteed: 144–148 MHz range only.
- Type of emission : FM
- Number of memory channels : 207 (incl. 6 scan edges and 1 Call)
- Scan types : Full, Program, Priority, Memory channel, Bank, Skip, Tone scans
- Frequency resolution : 5, 6.25, 10, 12.5, 15, 20, 25, 30, 50 kHz
- Operating temperature range : –10°C to +60°C; +14˚F to +140˚F
- Frequency stability : ±3 ppm (–10°C to +60°C)
- Power supply requirement : 13.8 V DC ±15%
- Current drain (at 13.8 V DC: approximately):
  - Transmit at 65 W 11 A (less than 9 A at 24 W for the Taiwan version)
  - Receive standby 0.4 A
    max. audio 1.5 A
- Antenna connector : SO-239 (50 Ω)
- Dimensions (proj. not included) : 140.0(W)×40.0(H)×118.0(D) mm; 5.5(W)×1.6(H)×4.6(D) in
- Weight (approximately) : 1.1 kg; 2.4 lb

All stated specifications are subject to change without notice or obligation.

■ TRANSMITTER

- Modulation system : Variable reactance frequency mod.
- Output power (approximately) :

	USA, Export	Taiwan	Korea
High:	65 W	24 W	50 W
Mid:	25 W	10 W	25 W
Mid-Low:	10 W	–	10 W
Low:	5 W	5 W	5 W

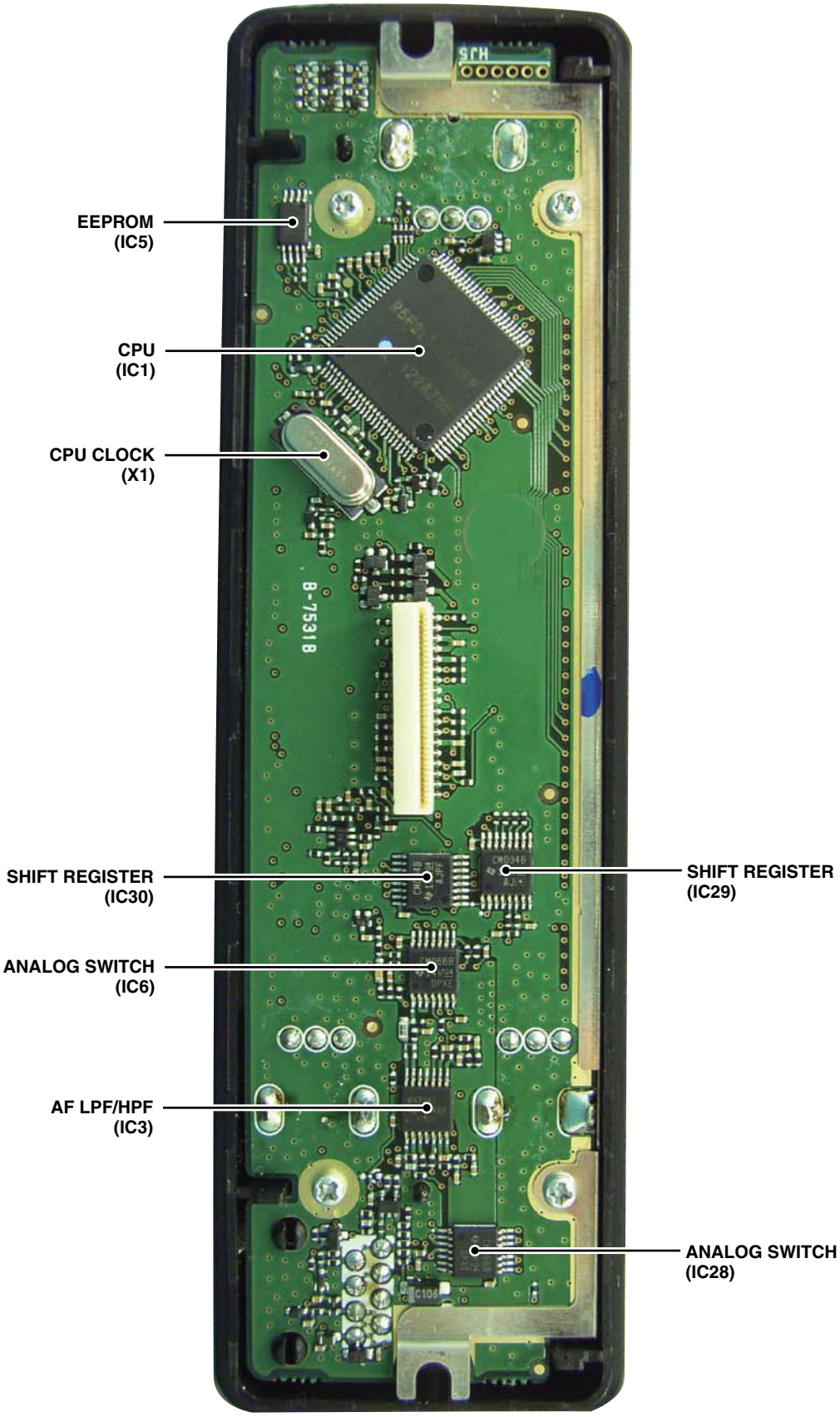
- Max. frequency deviation : ±5.0 kHz (Wide)/±2.5 kHz (Narrow)
- Spurious emissions : Less than –60 dBc
- Microphone connector : 8-pin modular (600 Ω)

■ RECEIVER

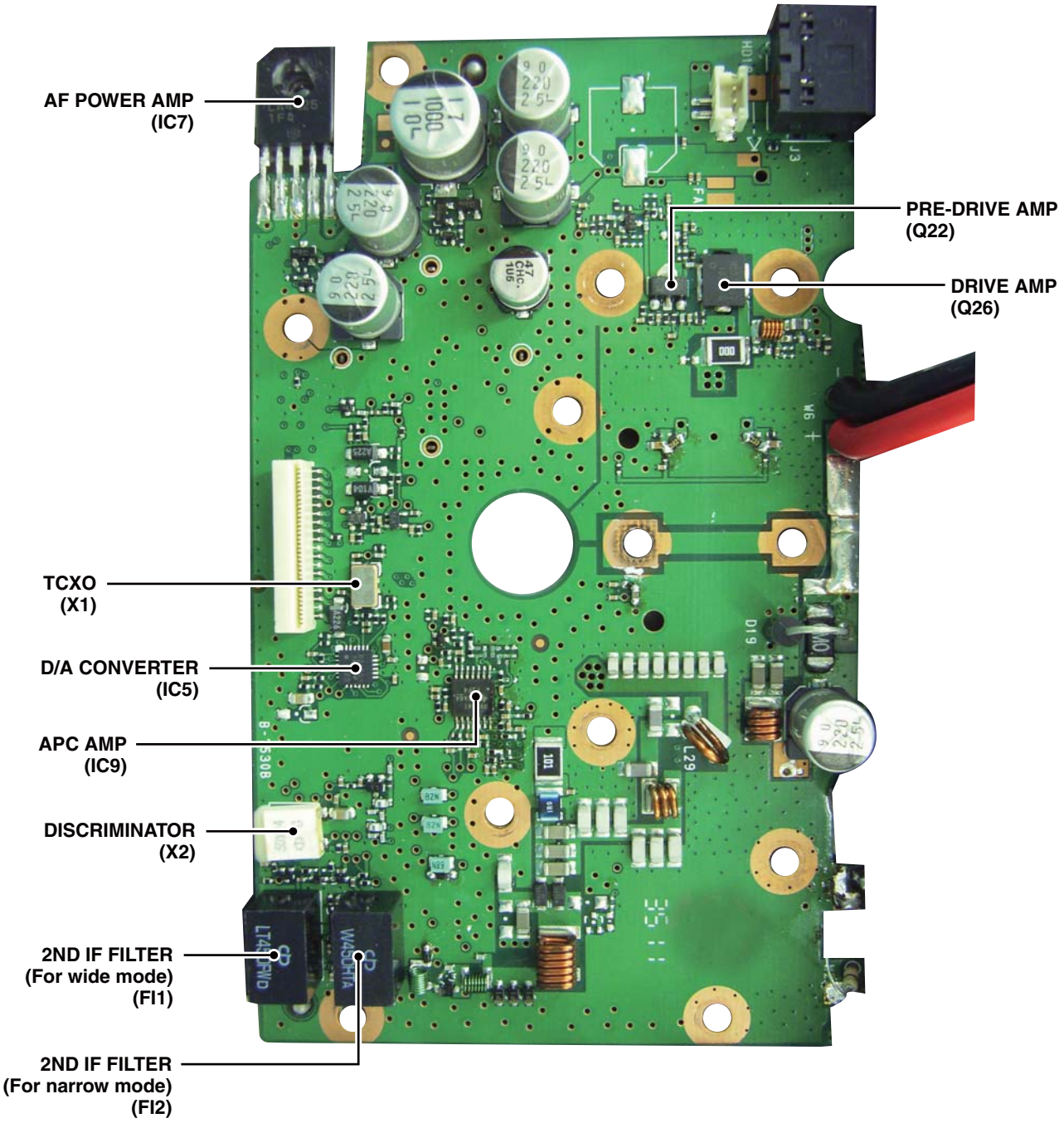
- Receive system : Double-conversion superheterodyne
- Intermediate frequencies : 1st: 46.35 MHz, 2nd: 450 kHz
- Sensitivity (at 12 dB SINAD) : Less than 0.18 µV
- Squelch sensitivity : Less than 0.13 µV (threshold)
- Selectivity :
  - [Wide] More than ±6 kHz/6 dB
    Less than ±14 kHz/60 dB
  - [Narrow] More than ±3 kHz/6 dB
    Less than ±9 kHz/55 dB
- Spurious and image rejection : More than 60 dB
- AF output power (at 13.8 V DC) : More than 3.5 W (4.5 W typical) (at 10% distortion with a 4 Ω load)
- External speaker connector : 3-conductor 3.5 (d) mm (1/8 inch)/4 Ω

SECTION 2 INSIDE VIEWS

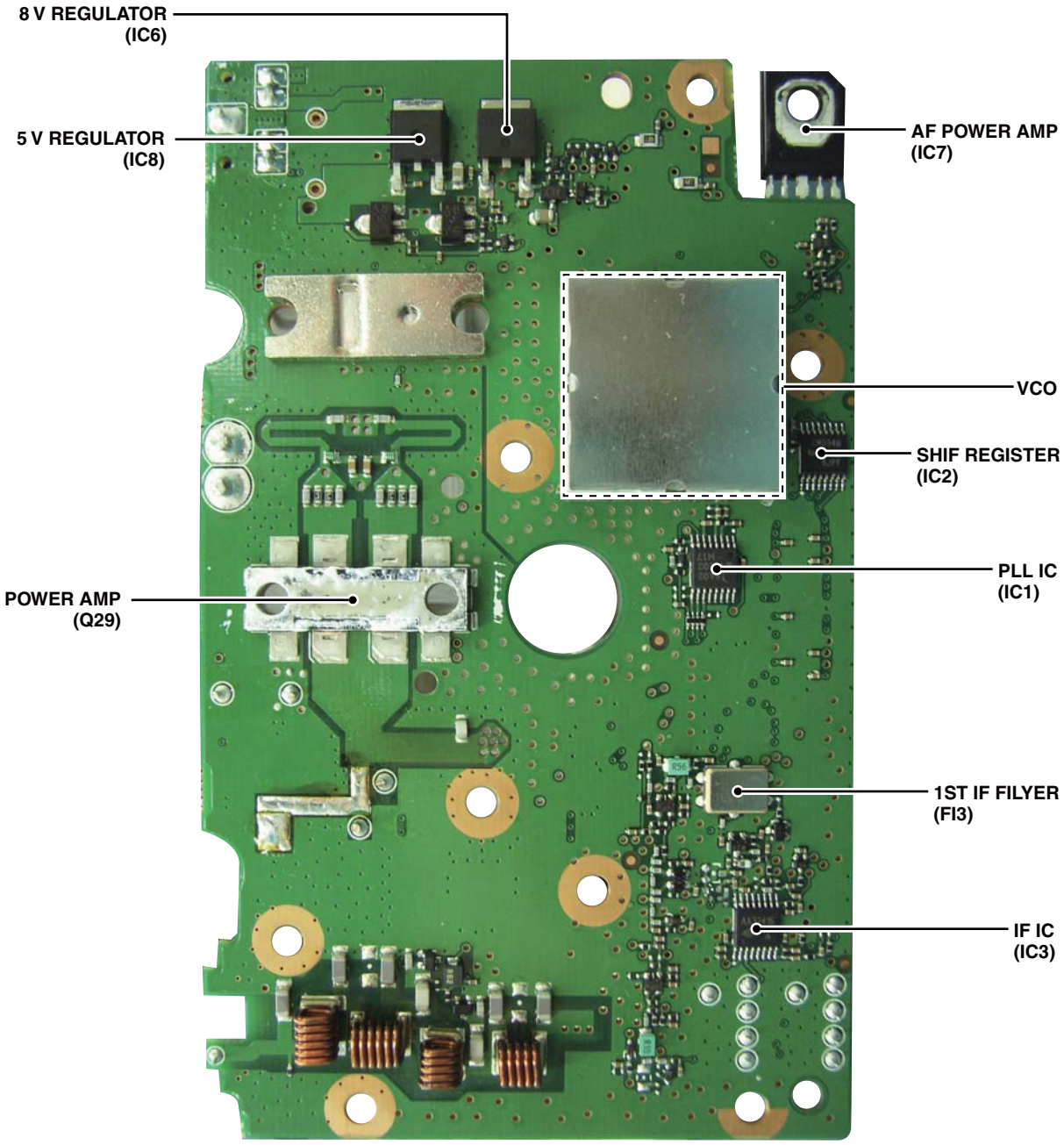
• LOGIC UNIT



• MAIN UNIT
(TOP VIEW)



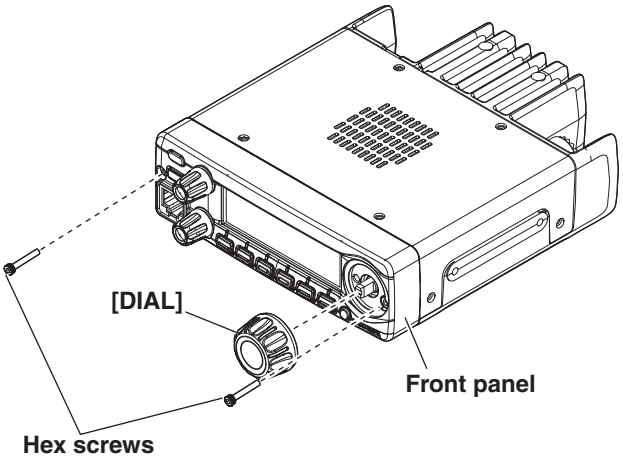
• MAIN UNIT
(BOTTOM VIEW)



SECTION 3 DISASSEMBLY INSTRUCTION

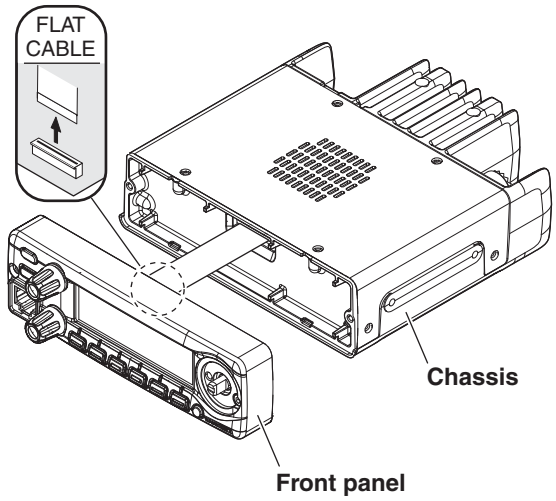
REMOVING THE FRONT PANEL

1) Remove **[DIAL]** from the front panel.
2) Remove 2 hex screws from the front panel.



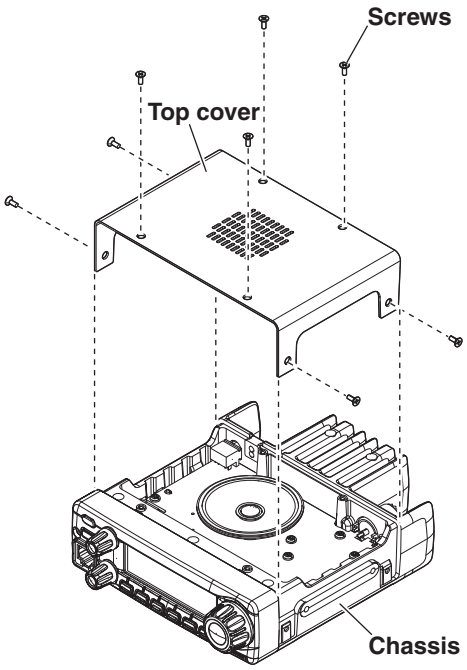
3) CAREFULLY separate the front panel from the chassis.
4) Disconnect the flat cable from the LOGIC UNIT.

BE CAREFUL about the **flat cable** and **connector** when separating the front panel from the chassis.

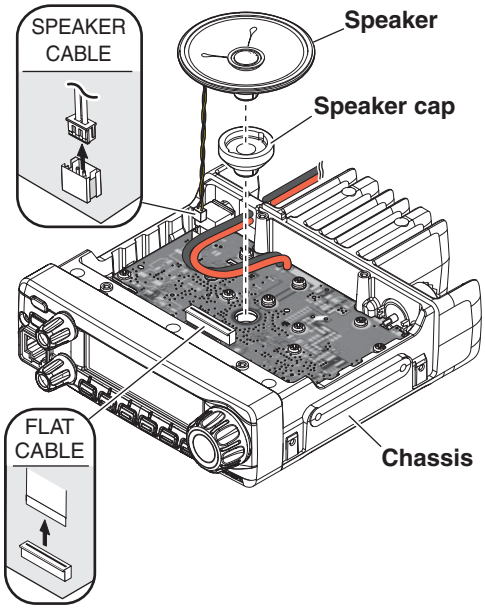


REMOVING THE MAIN UNIT

1) Remove 8 screws from the top cover, and then remove the top cover from the chassis.



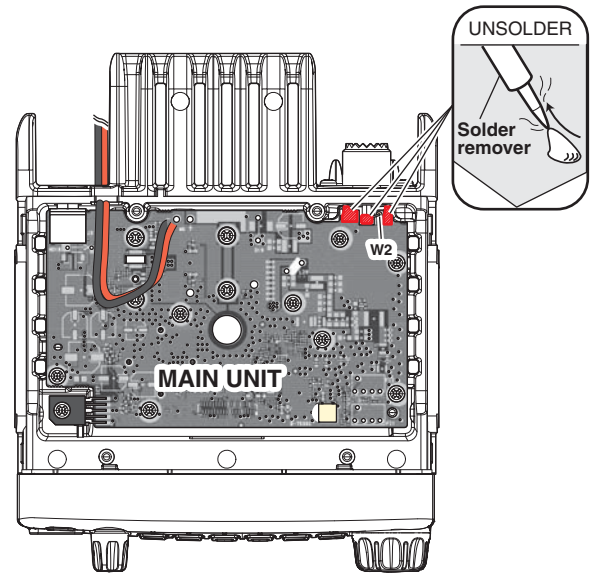
2) Disconnect the flat cable from the MAIN UNIT.
3) Disconnect the speaker cable from the MAIN UNIT.
4) Remove the speaker and speaker cap from the MAIN UNIT.



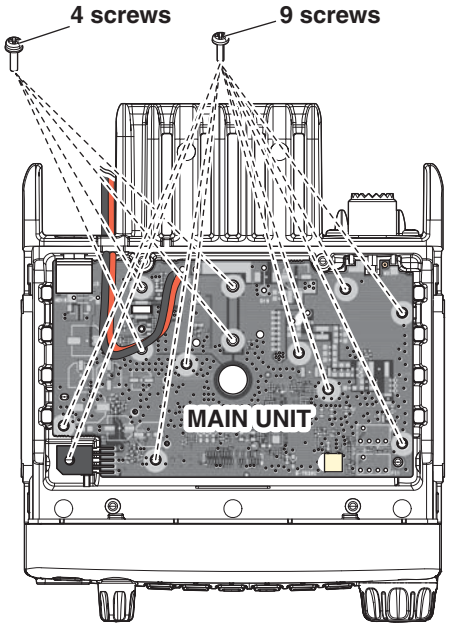
(Continued on page 3-2.)

REMOVING THE MAIN UNIT (Conitunued)

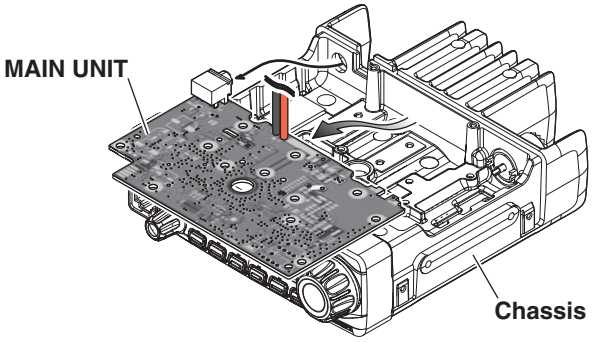
5) Unsolder 3 points at the antenna connector.



6) Remove the total of 13 screws from the MAIN UNIT.



7) Remove the MAIN UNIT from the chassis in the direction of the arrow.



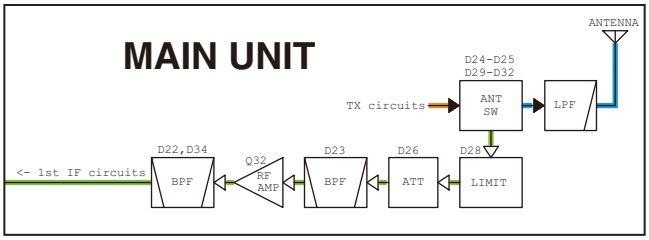
SECTION 4 CIRCUIT DESCRIPTION

4-1 RF CIRCUITS

The RX signal from the antenna is passed through the LPF (L36, L39, L41, L42, C291, C295, C296, C298, C300, C303, C304, C306, C307), antenna SW (D29–D32) and tuned BPF (D23, L34, C279), and then applied to the RF AMP (Q32).

The amplified RX signal is passed through a two-staged tuned BPF (D22, D34, L27, L28, C213, C224, C227, C236, C238, C242, C249), and then applied to the 1st IF circuits.

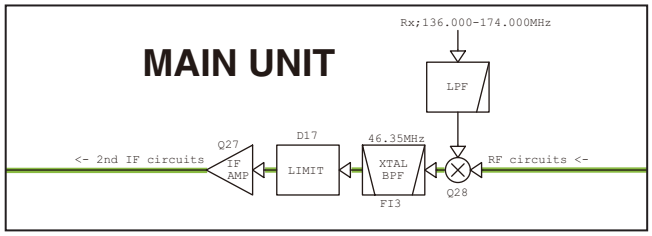
• RF CIRCUITS



1ST IF CIRCUITS

The RX signal from the RF circuits is applied to the 1st mixer (Q28), to be mixed with the 1st LO signal from the RX VCO (Q14, D10–D11, L6), resulting in the 46.35 MHz 1st IF signal. The 1st IF signal is passed through the 1st IF filter (FI3) to remove unwanted signals, and then applied to the 1st IF AMP (Q27). The amplified 1st IF signal is applied to the 2nd IF circuits.

• 1ST IF CIRCUITS



2ND IF CIRCUITS

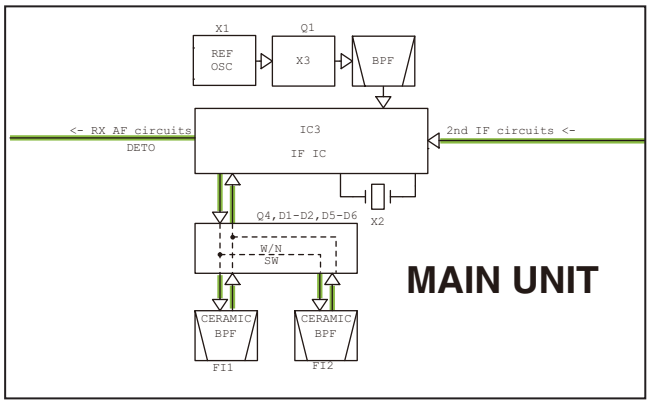
The 1st IF signal from the 1st IF circuits is applied to the IF IC (IC3).

The IF IC contains the 2nd mixer, 2nd IF AMP, detector, and so on, in its package.

The 1st IF signal is mixed with the 2nd LO signal at the internal 2nd mixer, resulting in the 455 kHz 2nd IF signal. The 2nd IF signal is passed through the 2nd IF filter (FI1: for wide mode, FI2: for narrow mode) to remove sideband noise, and then applied to the internal 2nd IF AMP. The amplified 2nd IF signal is applied to the quadrature detector circuit for frequency-demodulation.

The demodulated AF signal is output from the IF IC (pin 9), and then applied to the RX AF circuits on the LOGIC UNIT.

• 2ND IF CIRCUITS

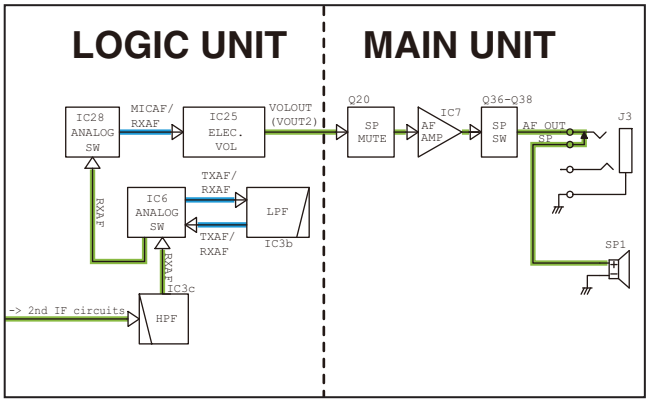


RX AF CIRCUITS

The demodulated AF signal from the MAIN UNIT is passed through the HPF (IC3c), AF line SW (IC6), LPF (IC3d), AF line SW (IC6), another AF line SW (IC28) and the electronic volume (IC25) for adjustment in level. The level-adjusted AF signal is applied to the MAIN UNIT.

The AF signal is applied to the AF AMP (IC7), through the speaker mute SW (Q20). The amplified AF signal is output to the internal speaker through the speaker mute SWs (Q33, Q35–Q37), or external speaker through the speaker mute SW (Q36, Q37) and the [SP] connector.

• RX AF CIRCUITS



SQUELCH CIRCUIT

The squelch circuit cuts off the AF output signal while no RF signal is received. Detecting noise components in the demodulated AF signal, the squelch circuit stops audio signal from being emitted.

A portion of the demodulated AF signal from the IF IC (IC3) is passed through the D/A converter (IC5) for level (=threshold) adjustment. The level-adjusted AF signal is passed through the noise filter (IC3, pins 7, 8 and R37, R39, R40, R191, C52, C53, C308) to filter only the noise components (approximately 30 kHz signals). The noise components are rectified by the noise detector, resulting in a DC voltage corresponding to the noise level.

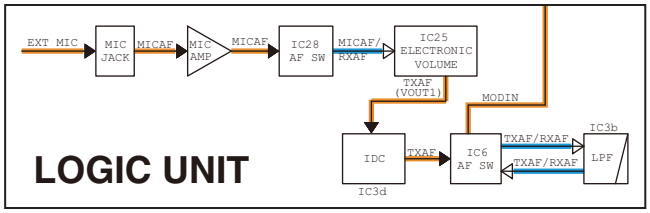
When the noise level is higher than the preset one, the internal comparator sets the “NOIS” signal to the CPU to “High,” and then the CPU controls the speaker mute SW (Q20) to stop audio signal from being emitted.

4-2 TX AF CIRCUITS

The AF signal from the microphone (MIC signal) is applied to the MIC AMP (IC3a), through the **[MIC]** jack. The amplified MIC signal is passed through the AF line SW (IC28) and the electronic volume (IC25) for adjustment in level. The level-adjusted AF signal is applied to the IDC (IC3d) which functions as the splatter filter.

The filtered MIC signal is passed through another AF line SW (IC6) and LPF (IC3b), then fed back to the AF line SW (IC6), and then applied to the modulation circuit on the MAIN UNIT.

• TX AF CIRCUITS

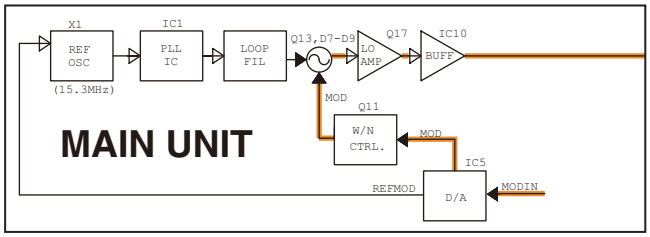


MODULATION CIRCUIT

The MIC signal from the LOGIC UNIT is applied to the D/A convertor (IC5) for adjustment in level (=deviation). The level-adjusted MIC signal is applied to the TX VCO (Q13, D7–D9) as a modulation signal.

The modulated TX VCO output signal is amplified by the LO AMP (Q17), and then applied to the TX AMP circuit as the TX signal, through the buffer (IC10), LO SW (D13) and another buffer (Q21).

• MODULATION CIRCUITS



TX AMP CIRCUITS

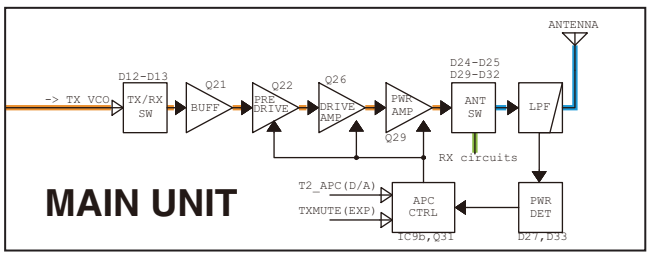
The TX signal is sequentially amplified by the pre-drive (Q22), drive (Q26) and power AMP (Q29). The amplified TX signal is applied to the antenna, through the ANT SW (D24, D25) and LPF (L36, L39, L41, L42, C291, C295, C296, C298, C300, C303, C304, C306, C307).

APC CIRCUIT

The voltage produced on both sides of L39 is rectified by D27 and D33, and used as the TX power sensing voltage. The voltage is applied to the APC AMP (IC9b), and the output voltage controls the gate voltages of Q29, Q26 and Q22.

The voltage difference between both sides of R157 is detected by IC9d, to control the TX power when abnormal current is detected.

• TX AMPLIFIER AND APC CIRCUITS



4-3 FREQUENCY SYNTHESIZER

The 2300H has two VCOs; TX VCO and RX VCO.

While transmitting, the TX VCO (Q13, D7–D9, L5) is activated. The oscillating frequency is set by the value of C89, L5, D7 and D8. Applying the voltage to both D7 and D8, the wide oscillating frequency range is obtained. The modulation signal is applied to D9 to obtain Frequency Modulation.

While receiving, the RX VCO (Q14, D10–D11, L6) is activated. The oscillating frequency is set by the value of C88, L6, D10 and D11. Applying the voltage to both D10 and D11, the wide oscillating frequency range is obtained.

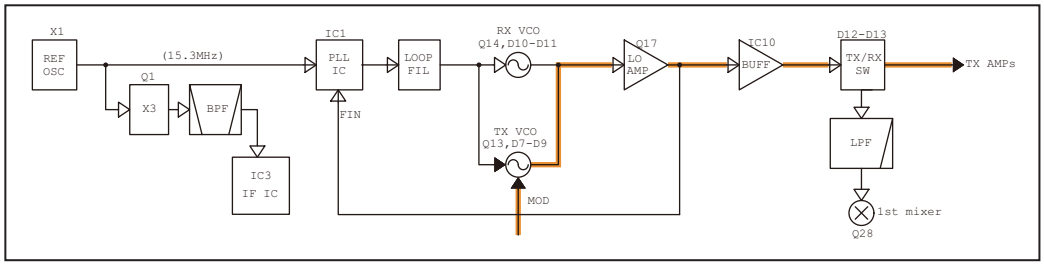
Q6, Q7 and Q8 compose a power supply line SW which toggles the TX and RX VCOs.

The output signal from each VCO is passed through the buffer (Q17) and applied to the PLL IC (IC1).

IC1 phase-compares the output of TCXO (X1) and VCO, and the phase-difference is output as the charge pump current. The current is passed though the loop filter to be converted into the lock voltage, which controls the oscillating frequency of each VCO.

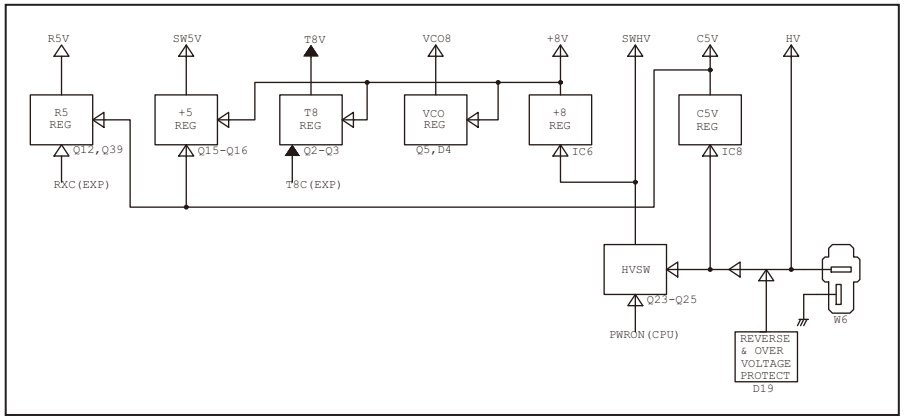
The output of Q17 is passed through the buffer (IC10), and used as the TX/RX LO signal.

• FREQUENCY SYNTHESIZER



4-4 VOLTAGE DIAGRAM

Voltage from the power supply is routed throughout the transceiver, via the regulators and switches.



4-5 PORT ALLOCATIONS

• CPU (LOGIC UNIT: IC1)

Pin No.	Line Name	Description	I/O
1	MICSEL	Microphone connection detect.	I
3	TONE	DTMF/BEEP/1750Hz tone signal.	O
4	CTCOUT	Tone signal (CTCSS/DTCS) encoding output.	O
10	RESET	CPU (LOGIC UNIT: IC1) reset signal. H=The CPU is reset.	I
15	EXTSTB	Shift register (MAIN UNIT: IC2) serial strobe.	O
16	DASTB	D/A converter (MAIN UNIT: IC5) strobe.	O
17	DATA	Shift register (MAIN UNIT: IC2) serial data.	O
18	EXTCK	Shift register (MAIN UNIT: IC2) serial clock.	O
19	NOIS	Noise level detect.	I
20	CLIN	Cloning data.	I
21	CLOUT	Cloning data.	O
22	PWRSW	**[⏻]** input. L= Pushed.	I
23	OE	Shift register (MAIN UNIT: IC2) chip enable.	O
24	PCON	Main power supply line control. H=During the transceiver is ON.	O
25	UNLK	PLL unlock detect. L=Unlocked.	I
26	PLLCK	PLL IC (MAIN UNIT: IC1) serial clock.	O
27	PLLDATA	PLL IC (MAIN UNIT: IC1) serial data.	O
28	PLLSTB	PLL IC (MAIN UNIT: IC1) strobe.	O
29	VOL-DATA	Electronic volume (LOGIC UNIT: IC25) serial data.	O
30	VOLCK	Electronic volume (LOGIC UNIT: IC25) serial clock.	O
71, 72	KS1, KS0	Key input ports.	I
76–79	KR3–KR0		I
80	LVIN	Lock voltage input.	I
81	HVIN	Power source voltage.	I
82	WX	Weather alert signal.	I
83	CTCIN	Tone signal (CTCSS/DTCS) decoding input.	I
84	SQLV	**[SQL]** input.	I
85	VOLV	**[VOL]** input.	I
86	MICUD	Up/down key on the microphone.	I
87	SD	RSSI voltage from the IF IC (MAIN UNIT: IC3).	I
88	TEMP	Temperature sensing voltage.	I
89	IDET	TX power AMP current flow sensing voltage.	I
94	ESCK	EEPROM (LOGIC UNIT: IC5) serial clock.	O
95	ESDA	EEPROM (LOGIC UNIT: IC5) serial data.	I/O
97	DICK	Rotary encoder (LOGIC UNIT: S9) pulse. (Phase A)	I
98	DIUD	Rotary encoder (LOGIC UNIT: S9) pulse. (Phase B)	I
99	PTT	**[PTT]** input. H= Pushed.	I
100	REMO	Microphone connection detect. H=Connected.	I

• D/A CONVERTER (MAIN: IC5)

Pin No.	Line Name	Description
6, 7	SQLIN	Noise squelch level adjustment.
8	T3	Tuned BPF tracking voltage adjustment.
11	T2_APC	RX: Tuned BPF tracking voltage adjustment. TX: Transmit output power adjustment.
12	T1	Tuned BPF tracking voltage adjustment.
19	FC	Reference frequency adjustment.
20	REFMOD	Reference oscillator deviation adjustment.
22, 23	MOD	VCO deviation adjustment.
24	SQLATT	Squelch attenuator level adjustment.

• SHIF REGISTER (MAIN: IC2)

Pin No.	Line Name	Description
5	PLLSW	PLL lockup time control. H=Fast lockup mode.
6	TXMUTE	TX mute control. L=Mute.
7	NWC	Narrow/Wide mode switching control. H=Wide mode.
11	SHIFT	VCO switching control. H=While receiving. (The RX VCO (Q14, D10–D11, L6) is activated) L=While transmitting. (The TX VCO (Q13, D7–D9, L5) is activated)
12	T8C	Power supply line “T8C” control. H=While transmitting.
13	RXC	Power supply line “R5V” control. H=While receiving.
14	SPMUTE	Speaker mute control. H=Mute.

SECTION 5 ADJUSTMENT PROCEDURE

5-1 PREPARATION

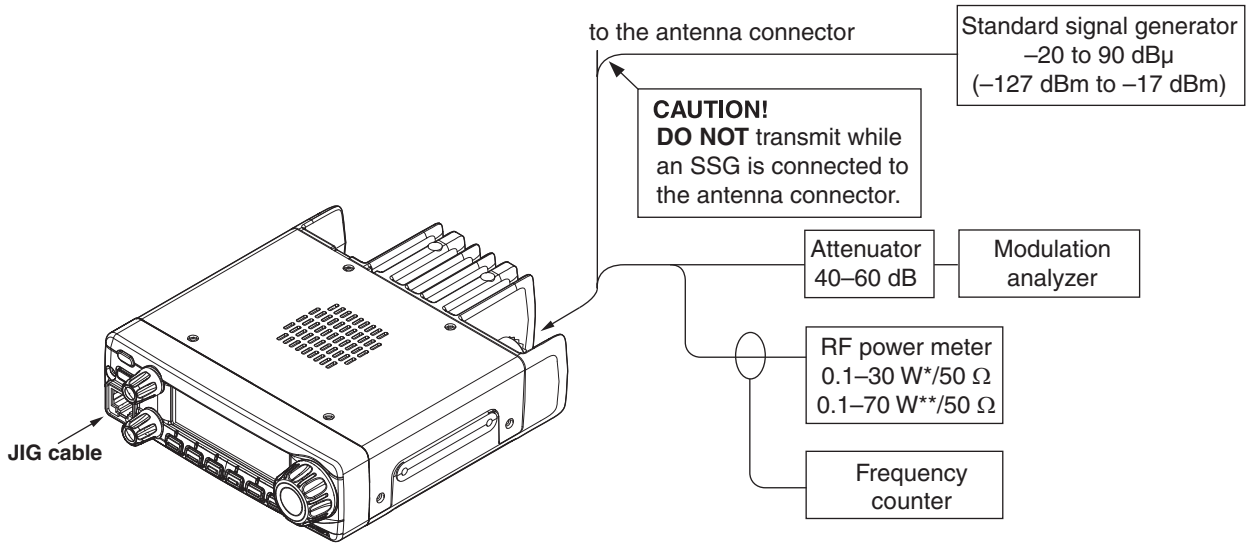
■ REQUIRED EQUIPMENT

EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
RF power meter (50 Ω terminated)	Measuring range : 0.1–30 W* : 0.1–70 W** Frequency range : 100–300 MHz SWR : Less than 1.2 : 1	JIG cable	Modified 8-pin modular plug. (See the illustration shown below.)
		Frequency counter	Range : 0.1–300 MHz Accuracy : ±1 ppm or better Input level : Less than 1 mW
Modulation analyzer	Frequency range : 30–300 MHz Measuring range : 0 to ±10 kHz	Standard signal generator (SSG)	Frequency range : 0.1–300 MHz Output level : –20 dBμ to 90 dBμ (–127 to –17 dBm)
Oscilloscope	Frequency range : DC–20 MHz Measuring range : 0.01–20 V	Attenuator	Attenuation : 40–60 dB Capacity : More than 30 W* More than 70 W**
Audio generator (AG)	Frequency range : 300–3000 Hz Output level : 1–500 mV	External speaker	Input impedance : 4 Ω
		AC millivoltmeter	Measuring range : 10 mV to 10 V

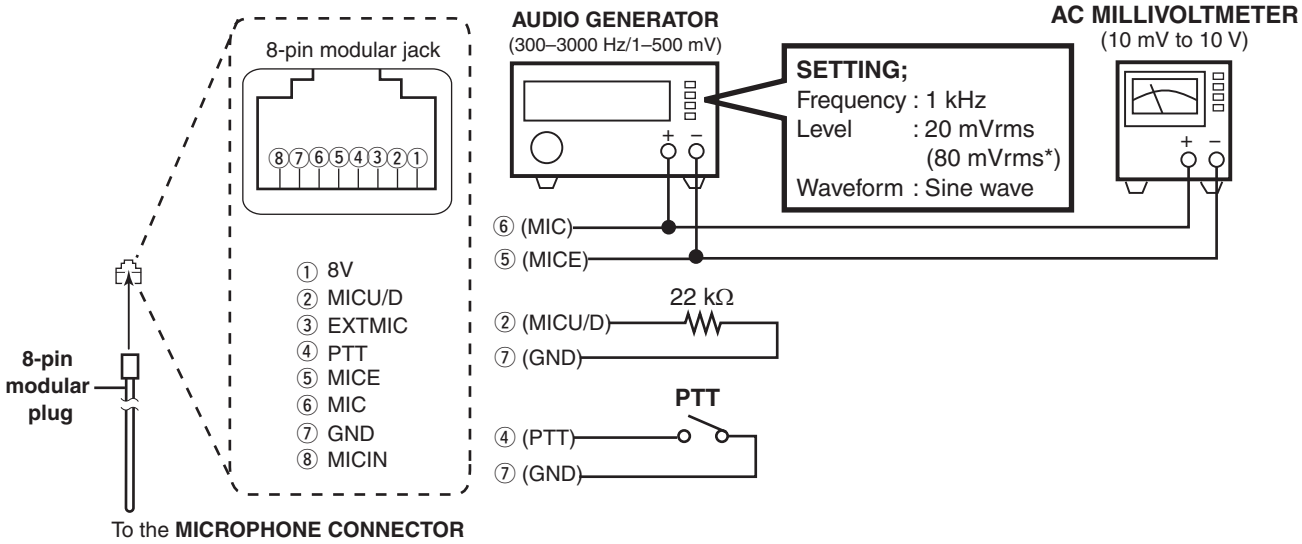
*; For [TPE]. **; All models except [TPE].

CAUTION!: BACK UP the originally programmed memory data in the transceiver, before starting the adjustments. When the adjustment is finished, the memory data may be cleared.

■ CONNECTION



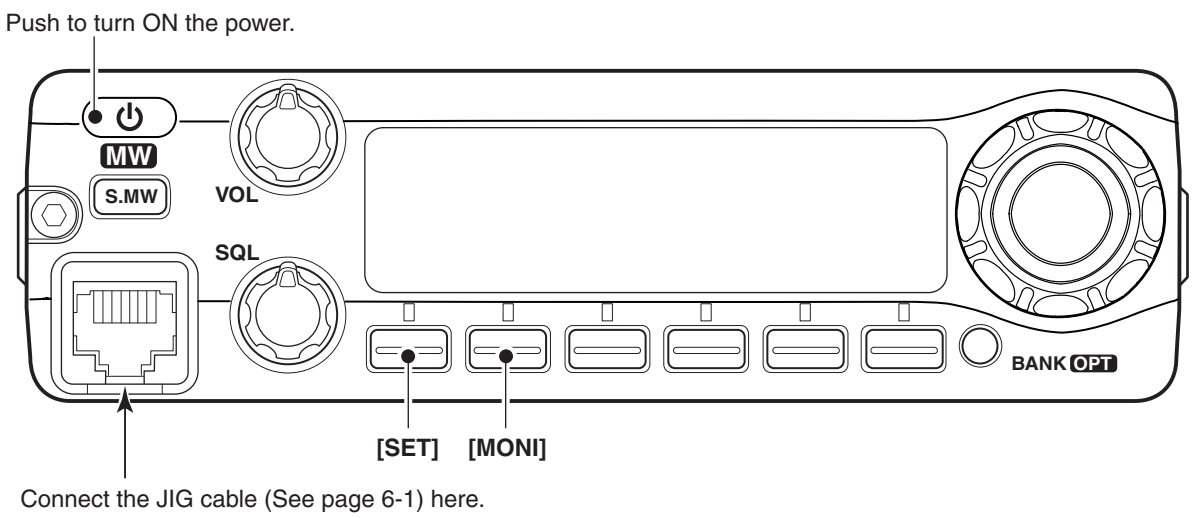
■ JIG CABLE



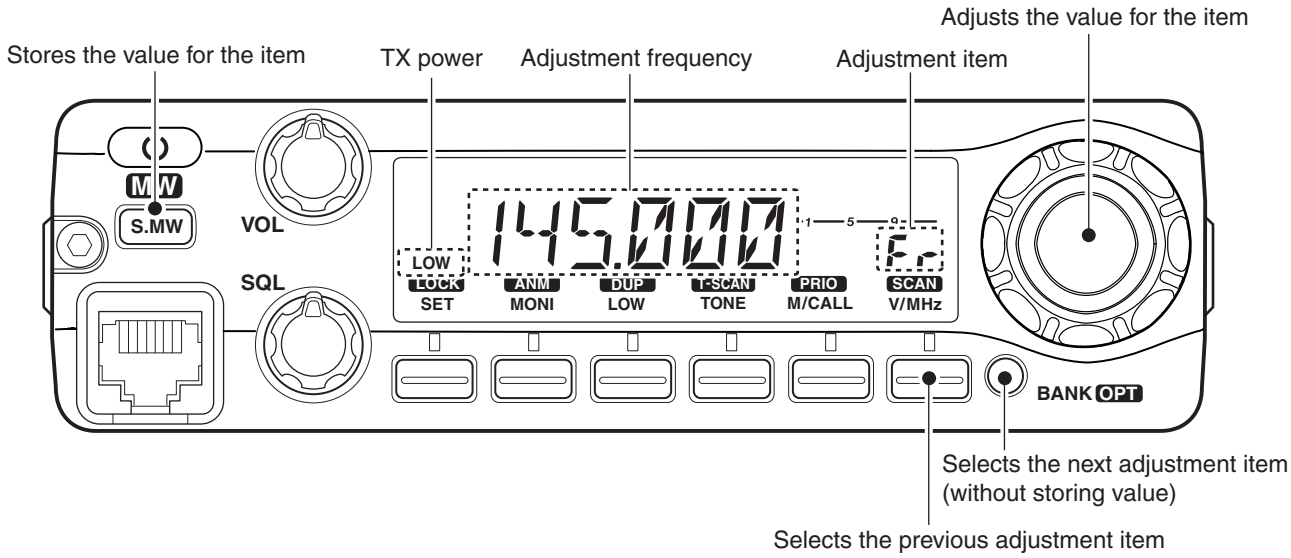
*; For [USA].

■ ENTERING THE ADJUSTMENT MODE

1) Turn OFF the power.
2) Connect the JIG cable (See page 6-1) to the microphone connector.
3) While holding down **[SET]** and **[MONI]**, turn ON the power.



■ KEY ASSIGNMENTS FOR THE ADJUSTMENT MODE



■ QUITTING THE ADJUSTMENT MODE

1) Turn OFF the power.
2) Disconnect the JIG cable, and then turn ON the power.

5-2 FREQUENCY ADJUSTMENT

1) Select an adjustment item using **[BANK]** or **[V/MHz]**.
2) Set or modify the adjustment value as specified using **[DIAL]**, and then push **[S.MW]**.

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
REFERENCE FREQUENCY	1	• Transmitting	1) Connect a power meter or dummy load to the antenna connector. 2) Loosely couple a frequency counter to the antenna connector. 3) While transmitting, adjust the frequency using **[DIAL]**, and then push **[S.MW]** to store the adjustment value.	[Fr]	145.000000 MHz (146.000000 MHz*) (±100 Hz)

*: For [USA]

5-3 TRANSMIT ADJUSTMENTS

1) Select an adjustment item using **[BANK]** or **[V/MHz]**.
2) Set or modify the adjustment value as specified using **[DIAL]**, and then push **[S.MW]**.

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
TX OUTPUT POWER (Hi power) -Band low-	1	**NOTE:** Rotating **[DIAL]** in the TX adjustment mode without actually transmitting will result in an inaccurate adjustment.			
		• Transmitting	1) Connect an RF power meter to the antenna connector. 2) While transmitting, adjust the frequency using **[DIAL]**, and then push **[S.MW]** to store the adjustment value.	[Po]	59–61 W (51–53 W**)
-Band center-	2				65–67 W (51–53 W**)
-Band high-	3				54–56 W (51–53 W**)
(Mid power) -Band low-	4				24–26 W (21–23 W***)
-Band center-	5				
-Band high-	6				
(Mid-Low power) -Band low-	7				9–11 W
-Band center-	8				
-Band high-	9				
(Low power) -Band low-	10				4–6 W
-Band center-	11				
-Band high-	12				
DV DEVIATION -Band low-	1	• Transmitting	1) Connect a modulation analyzer to the antenna connector, through an attenuator, and then set it to; HPF : OFF LPF : 20 kHz 2) Connect an audio generator to the JIG cable, and set it to; Frequency : 1 kHz Level : 20 mVrms (80 mVrms*) 3) While transmitting, adjust the deviation using **[DIAL]**, and then push **[S.MW]** to store the adjustment value.	[dE]	4.1–4.3 kHz
-Band center-	2				
-Band high-	3				
MODULATION BALANCE -Band low-	1	• Transmitting	1) Connect a modulation analyzer to the antenna connector, through an attenuator, and then set it to; HPF : OFF LPF : 20 kHz 2) While transmitting, adjust the deviation using **[DIAL]**, and then push **[S.MW]** to store the adjustment value.	[dt]	1.50–1.60 kHz
-Band center-	2				
-Band high-	3				
TONES DEVIATION	1	• Transmitting	1) Connect a modulation analyzer to the antenna connector, through an attenuator, and then set it to; HPF : OFF LPF : 20 kHz 2) While transmitting, adjust the deviation using **[DIAL]**, and then push **[S.MW]** to store the adjustment value.	[dC]	0.70–0.80 kHz
CTCSS	2				
DTCS	3			[dd]	
DTMF	4			[dF]	3.4–3.6 kHz
EUR	5			[dU]	

*: For [USA] **: For [KOR] ***: For [TPE]

5-4 RECEIVE ADJUSTMENTS

1) Select an adjustment item using **[BANK]** or **[V/MHz]**.
2) Set or modify the adjustment value as specified using **[DIAL]**, and then push **[S.MW]**.

ADJUSTMENT		TRANSCEIVER'S CONDITION	OPERATION	ADJUSTMENT ITEM	VALUE
RX SENSITIVITY -Band low-	1	**NOTE:** "RX SENSITIVITY" must be adjusted before "S-METER." And when "RX SENSITIVITY" is re-adjusted, "S-METER" must be re-adjusted too.			
		• Receiving	1) Connect an SSG to the antenna connector, and then set it to; Frequency : 136.020 MHz Level† : 0 dBμ (–107 dBm) Modulation : 1 kHz Deviation : ±3.5 kHz 2) Push **[S.MW]**.	[t 1]	Push **[S.MW]** (Automatic adjustment)
-Band center-	2		1) Set the SSG to; Frequency : 155.020 MHz 2) Push **[S.MW]**.	[t2]	
-Band high-	3		1) Set the SSG to; Frequency : 173.980 MHz 2) Push **[S.MW]**.	[t3]	
SQUELCH (Wide)	1	• Receiving	1) Connect an SSG to the antenna connector, and then set it to; SSG output : OFF 2) Push **[S.MW]**.	[SQ]	Push **[S.MW]**. (Automatic adjustment)
(Narrow)	2			[SQn]	
S-METER (S1 level setting)	1	**NOTE:** "RX SENSITIVITY" must be adjusted before "S-METER." And when "RX SENSITIVITY" is re-adjusted, "S-METER" must be re-adjusted too.			
		• Receiving	1) Connect an SSG to the antenna connector and set it to; Frequency : 145.020 MHz (146.020 MHz*) Level† : –7 dBμ (–114 dBm) Deviation : None 2) Push **[S.MW]**.	[S 1]	Push **[S.MW]**. (Automatic adjustment)
(S2 level setting)	3		1) Set the SSG to; Level† : –2 dBμ (–109 dBm) Deviation : None 2) Push **[S.MW]**.	[S2]	
(S3 level setting)	4		1) Set the SSG to; Level† : +12 dBμ (–95 dBm) Deviation : None 2) Push **[S.MW]**.	[S3]	
(S3 level setting) -Band low-	5		1) Connect an SSG to the antenna connector and set it to; Frequency : 136.020 MHz Level† : –2 dBμ (–109 dBm) Deviation : None 2) Push **[S.MW]**.		
-Band center-	6		1) Set the SSG to; Frequency : 145.020 MHz 2) Push **[S.MW]**.		
-Band high-	7		1) Set the SSG to; Frequency : 173.980 MHz 2) Push **[S.MW]**.		

†; The output level of the standard signal generator (SSG) is indicated as the SSG's open circuit.

SECTION 6 PARTS LIST

[LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1140015980	S.IC R5F2L3AACNFP	B	100.25/17.1
IC3	1110006470	S.IC LMV324IPWR	B	27.5/17.6
IC4	1110007620	S.IC NJU7704F3-42A-TE1-#ZZZB	B	111.6/23.2
IC5	1130016260	S.IC BR24T64FVT-WE2	B	113.2/4.1
IC6	1130011770	S.IC CD4066BPWR	B	40.9/18.2
IC24	1110006490	S.IC LMV321IDCKR	B	17.9/14.0
IC25	1110007200	S.IC M61545AFP#DF0R	T	26.1/18.4
IC28	1130011770	S.IC CD4066BPWR	B	13.3/22.3
IC29	1130011760	S.IC CD4094BPWR	B	50.5/25.2
IC30	1130011760	S.IC CD4094BPWR	B	49.5/17.9
Q1	1530004140	S.TRA L2SC4081RT1G <SLVJ>	B	14.7/8.6
Q2	1590004070	S.TRA LDTC144EET1G <SLVJ>	B	45.5/11.4
Q3	1590004390	S.TRA DMG504010R	B	53.7/9.4
Q5	1590004100	S.TRA LDTC144TET1G <SLVJ>	B	85.8/15.1
Q7	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	79.9/16.8
Q8	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	76.7/12.3
Q10	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	77.4/16.8
Q11	1530002851	S.TRA 2SC4116-BL(TE85RF)	B	80.1/12.5
D1	1790001810	S.VAR AVR-M1005C080MTABB	B	15.2/11.8
D2	1750001810	S.DIO L1SS400T1G <SLVJ>	B	10.2/7.4
D3	1750002040	S.ZEN DZ2J091M0L	B	2.8/10.9
D4	1750001850	S.DIO LDAN222T1G <SLVJ>	T	111.7/15.6
D6	1750000370	S.DIO DA221 TL	B	87.7/16.4
D7	1750001850	S.DIO LDAN222T1G <SLVJ>	T	98.3/1.7
D8	1750001850	S.DIO LDAN222T1G <SLVJ>	T	62.3/1.7
D9	1750001850	S.DIO LDAN222T1G <SLVJ>	T	50.3/1.7
D12	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	125.7/5.1
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
D13	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	126.9/5.1
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
D16	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-01]	B	128.1/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D17	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	129.3/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D21	1750001850	S.DIO LDAN222T1G <SLVJ>	T	108.6/1.7
D22	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	125.7/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-01]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D23	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	126.9/7.6
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
D25	1750000771	S.VAR HVC376BTRF-E	B	84.4/6.2
D27	1750001810	S.DIO L1SS400T1G <SLVJ>	B	125.7/10.1
D28	1750001810	S.DIO L1SS400T1G <SLVJ> [TPE]	B	126.9/10.1
	1750001810	S.DIO L1SS400T1G <SLVJ> [USA]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [KOR]		
	1750001810	S.DIO L1SS400T1G <SLVJ> [EXP-02]		
D32	1750001810	S.DIO L1SS400T1G <SLVJ>	B	7.0/4.9
D33	1750001810	S.DIO L1SS400T1G <SLVJ>	B	99.0/5.0
D36	1750001810	S.DIO L1SS400T1G <SLVJ>	T	112.5/13.2
D37	1750001810	S.DIO L1SS400T1G <SLVJ>	B	87.8/18.1
X1	6050013180	S.XTA CR-910(HC-49US/9.8304 MHz) <JJE>	B	89.8/7.9
R1	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	17.0/15.8
R2	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	15.8/15.4
R3	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	17.0/11.8
R5	7030005230	S.RES ERJ2GEJ 334 X (330K)	B	14.9/15.4
R6	7030005170	S.RES ERJ2GEJ 474 X (470K)	B	20.1/13.8
R7	7510001770	S.THE NTCG10 4LH 473JT	T	112.1/23.0
R8	7030007290	S.RES ERJ2GEJ 222 X (2.2K)	B	12.5/7.3
R9	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	12.0/8.5
R10	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	14.7/6.8
R11	7030005830	S.RES RR0510P-223-D (22K)	T	112.6/24.2
R12	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	12.9/8.5
R14	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	14.0/15.4
R15	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	13.1/15.4
R16	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	55.5/13.3
R17	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	54.1/12.8
R18	7030008310	S.RES ERJ2GEJ 564 X (560K)	B	45.6/26.3
R19	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	34.3/21.3
R21	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	53.7/11.6
R24	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	51.6/9.8
R25	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	51.6/10.7
R27	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	44.4/13.0
R28	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	51.6/8.0
R29	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	55.4/9.8
R30	7030007340	S.RES ERJ2GEJ 153 X (15K)	T	27.1/13.6
R31	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	105.4/7.9
R32	7030007570	S.RES ERJ2GEJ 122 X (1.2K)	B	54.4/6.6
R34	7030005070	S.RES ERJ2GEJ 683 X (68K)	B	52.0/6.8
R35	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	30.3/14.4
R36	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	96.5/6.6
R37	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.4/8.2
R39	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	33.4/16.0
R40	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	93.0/17.2
R41	7030008010	S.RES ERJ2GEJ 123 X (12K)	B	84.8/7.3
R45	7030008410	S.RES ERJ2GEJ 392 X (3.9K)	B	32.1/22.6
R47	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	11.8/6.4

[LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
R48	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	93.3/8.9
R49	7030005600	S.RES ERJ2GEJ 273 X (27K)	B	32.1/21.7
R50	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	32.9/18.4
R51	7030005530	S.RES ERJ2GEJ 100 X (10)	B	92.2/10.8
R53	7030007310	S.RES ERJ2GEJ 155 X (1.5M)	B	32.5/19.6
R56	7030003660	S.RES ERJ3GEYJ 683 V (68K)	B	35.1/15.4
R57	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	107.9/4.7
R58	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	108.8/4.7
R59	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	87.6/14.5
R60	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	106.3/8.8
R61	7210003340	VAR R0903N-B50KL-20F <SKD>		
R62	7210003340	VAR R0903N-B50KL-20F <SKD>		
R64	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	42.7/22.4
R67	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	42.8/13.0
R69	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	41.4/14.5
R70	7030007350	S.RES ERJ2GEJ 393 X (39K)	B	42.3/14.5
R72	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	38.6/15.0
R73	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	38.6/14.1
R74	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	38.6/13.2
R76	7030008290	S.RES ERJ2GEJ 183 X (18K)	B	21.7/19.3
R78	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	22.2/18.1
R79	7030007280	S.RES ERJ2GEJ 331 X (330)	B	81.6/16.3
R80	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	78.5/11.0
R81	7030005310	S.RES ERJ2GEJ 124 X (120K)	B	22.1/20.5
R82	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	79.7/10.8
R83	7030007260	S.RES ERJ2GEJ 330 X (33)	T	44.5/18.2
R84	7030005030	S.RES ERJ2GEJ 152 X (1.5K)	B	22.6/21.7
R85	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	80.5/14.6
R86	7030007260	S.RES ERJ2GEJ 330 X (33)	T	43.6/18.2
R87	7410001130	S.ARR EXB28V102JX	B	112.5/14.8
R88	7030007260	S.RES ERJ2GEJ 330 X (33)	T	66.5/18.2
R89	7030007260	S.RES ERJ2GEJ 330 X (33)	T	65.6/18.2
R90	7030007280	S.RES ERJ2GEJ 331 X (330)	B	79.2/14.6
R91	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	29.8/21.6
R92	7030005310	S.RES ERJ2GEJ 124 X (120K)	T	30.3/19.5
R93	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	59.0/21.4
R94	7030007260	S.RES ERJ2GEJ 330 X (33)	T	88.5/18.2
R95	7030007270	S.RES ERJ2GEJ 151 X (150)	B	76.7/14.6
R97	7030007260	S.RES ERJ2GEJ 330 X (33)	T	87.6/18.2
R99	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	B	78.0/14.6
R101	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	8.2/14.7
R103	7030005100	S.RES ERJ2GEJ 154 X (150K)	B	22.6/16.0
R104	7030007340	S.RES ERJ2GEJ 153 X (15K)	B	20.8/17.0
R105	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	22.2/17.2
R108	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	111.2/20.6
R114	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	81.5/7.3
R133	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	94.7/8.0
R134	7030005240	S.RES ERJ2GEJ 473 X (47K)	B	44.4/25.9
R135	7030005040	S.RES ERJ2GEJ 472 X (4.7K)	T	127.5/26.6
R137	7030005110	S.RES ERJ2GEJ 224 X (220K)	B	107.2/8.0
R519	7030005010	S.RES ERJ2GEJ 681 X (680)	B	34.6/16.4
R554	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	82.7/7.7
R555	7410001130	S.ARR EXB28V102JX	T	106.0/15.4
R556	7410001130	S.ARR EXB28V102JX	T	106.1/12.4
R557	7410001130	S.ARR EXB28V102JX	T	102.5/11.0
R558	7030005050	S.RES ERJ2GEJ 103 X (10K)	B	56.4/13.3
R559	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	56.4/10.9
R561	7030010040	S.RES ERJ2GEJ-JPW	B	100.0/4.4
R562	7030010040	S.RES ERJ2GEJ-JPW	B	91.0/11.3
R563	7030005700	S.RES ERJ2GEJ 274 X (270K)	B	45.6/25.4
R564	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	51.3/22.1
R565	7030005090	S.RES ERJ2GEJ 104 X (100K)	T	48.0/22.1
R566	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/26.9
R567	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/26.0
R568	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/25.1
R569	7030005090	S.RES ERJ2GEJ 104 X (100K)	B	55.5/24.2
R570	7030005240	S.RES ERJ2GEJ 473 X (47K)	T	130.4/23.3
R572	7030010040	S.RES ERJ2GEJ-JPW	B	20.1/14.7
R573	7030005120	S.RES ERJ2GEJ 102 X (1K)	B	7.1/6.9
R574	7030005160	S.RES ERJ2GEJ 105 X (1M)	B	42.6/21.5
R575	7030005220	S.RES ERJ2GEJ 223 X (22K)	B	35.5/19.1
C4	4030011600	S.CER C1608 JB 1E 104K-T	T	113.6/25.5
C5	4030017420	S.CER C1005 CH 1H 470J-T	B	59.9/20.6
C7	4030017460	S.CER C1005 JB 1H 102K-T	B	60.3/13.2
C8	4030016790	S.CER C1005 JB 1E 103K-T	B	18.3/12.2
C10	4030017460	S.CER C1005 JB 1H 102K-T	B	60.8/20.5
C11	4030017460	S.CER C1005 JB 1H 102K-T	B	3.5/7.2
C13	4030017460	S.CER C1005 JB 1H 102K-T	B	61.2/13.2
C14	4030017460	S.CER C1005 JB 1H 102K-T	B	72.3/20.5
C15	4030017460	S.CER C1005 JB 1H 102K-T	B	62.8/20.5
C16	4030017460	S.CER C1005 JB 1H 102K-T	B	2.9/13.0
C20	4030017460	S.CER C1005 JB 1H 102K-T	B	6.0/6.0
C23	4030017460	S.CER C1005 JB 1H 102K-T	B	8.4/6.9
C28	4030017460	S.CER C1005 JB 1H 102K-T	B	11.9/16.8
C30	4030017420	S.CER C1005 CH 1H 470J-T	B	65.3/13.2
C31	4030017420	S.CER C1005 CH 1H 470J-T	B	16.1/11.8
C33	4030013960	S.CER C1005 JB 1C 473K-T	B	13.1/17.0
C34	4030017790	S.CER C1005 JB 1H 682K-T	B	54.6/14.0
C35	4030017040	S.CER C1005 JB 1A 333K-T	B	52.8/11.6
C37	4030016790	S.CER C1005 JB 1E 103K-T	B	50.0/10.7
C38	4030018080	S.CER C1005 JB 1H 182K-T	B	51.6/11.6
C39	4030017460	S.CER C1005 JB 1H 102K-T	B	95.6/7.5
C41	4030016930	S.CER C1005 JB 1A 104K-T	B	33.8/22.5
C42	4030016950	S.CER C1005 JB 1A 473K-T	T	25.9/13.2
C43	4030016950	S.CER C1005 JB 1A 473K-T	B	44.0/11.8
C44	4030018390	S.CER C1005 JB 1A 563K-T	T	28.3/13.2

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[LOGIC UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C45	4030016790	S.CER	C1005 JB 1E 103K-T	B	96.5/5.0
C46	4030016970	S.CER	C1005 JB 1E 223K-T	B	56.6/8.1
C47	4030016930	S.CER	C1005 JB 1A 104K-T	B	34.9/17.6
C48	4030017760	S.CER	C1005 JB 1H 222K-T	B	56.6/7.2
C49	4030016930	S.CER	C1005 JB 1A 104K-T	B	109.8/22.7
C51	4030017030	S.CER	C1005 JB 1A 273K-T	B	111.4/25.0
C52	4030017420	S.CER	C1005 CH 1H 470J-T	T	7.3/27.6
C53	4030017690	S.CER	C1005 CH 1H 121J-T	B	86.1/6.7
C54	4030016790	S.CER	C1005 JB 1E 103K-T	B	33.4/21.2
C55	4030017620	S.CER	C1005 CH 1H 100C-T	B	92.9/10.1
C56	4030017760	S.CER	C1005 JB 1H 222K-T	B	32.1/20.8
C57	4030018110	S.CER	C1005 JB 1H 272K-T	B	33.4/19.6
C58	4030017780	S.CER	C1005 JB 1H 472K-T	T	106.1/17.1
C59	4030017640	S.CER	C1005 CH 1H 150J-T	B	94.0/9.5
C60	4030017780	S.CER	C1005 JB 1H 472K-T	B	110.7/13.2
C61	4030017780	S.CER	C1005 JB 1H 472K-T	T	110.3/12.7
C62	4030016930	S.CER	C1005 JB 1A 104K-T	B	110.7/6.5
C64	4030016790	S.CER	C1005 JB 1E 103K-T	B	85.9/13.5
C66	4030016790	S.CER	C1005 JB 1E 103K-T	B	43.5/15.0
C67	4030019560	S.CER	GRM21BB31C106KE15L	T	95.4/17.6
C68	4030016930	S.CER	C1005 JB 1A 104K-T	T	99.0/10.9
C69	4030016960	S.CER	C1005 JB 1E 183K-T	B	42.6/23.3
C70	4030016790	S.CER	C1005 JB 1E 103K-T	T	111.7/24.2
C71	4030016790	S.CER	C1005 JB 1E 103K-T	B	40.2/14.1
C73	4030019620	S.CER	GRM188B31C225KE14D	B	40.7/13.0
C74	4030018920	S.CER	C1005 JB 1H 392K-T	B	20.5/20.5
C75	4030017450	S.CER	C1005 JB 1H 271K-T	B	22.6/19.3
C76	4030017040	S.CER	C1005 JB 1A 333K-T	B	21.4/22.2
C77	4030019620	S.CER	GRM188B31C225KE14D	T	31.3/20.0
C78	4030016790	S.CER	C1005 JB 1E 103K-T	B	26.1/14.4
C79	4030017440	S.CER	C1005 CH 1H 221J-T	B	21.7/16.0
C80	4030019990	S.CER	C1005 JB 1C 104K-T	B	82.7/6.1
C82	4030017460	S.CER	C1005 JB 1H 102K-T	B	83.6/7.7
C83	4030016930	S.CER	C1005 JB 1A 104K-T	T	29.4/19.5
C85	4030019990	S.CER	C1005 JB 1C 104K-T	B	22.1/14.8
C86	4030017460	S.CER	C1005 JB 1H 102K-T	B	10.1/23.7
C87	4030018890	S.CER	C1005 JB 0J 224K-T	B	108.1/8.0
C88	4030018890	S.CER	C1005 JB 0J 224K-T	B	45.2/27.5
C89	4030016930	S.CER	C1005 JB 1A 104K-T	B	46.2/15.4
C90	4030017780	S.CER	C1005 JB 1H 472K-T	T	100.4/11.6
C91	4030017780	S.CER	C1005 JB 1H 472K-T	B	109.4/9.6
C92	4030017780	S.CER	C1005 JB 1H 472K-T	T	104.5/10.9
C94	4030017780	S.CER	C1005 JB 1H 472K-T	B	110.0/12.3
C95	4030017780	S.CER	C1005 JB 1H 472K-T	B	110.0/11.4
C96	4030017780	S.CER	C1005 JB 1H 472K-T	B	109.4/10.5
C97	4030017780	S.CER	C1005 JB 1H 472K-T	T	106.1/10.7
C99	4030017770	S.CER	C1005 JB 1H 332K-T	B	56.8/12.1
C100	4030017720	S.CER	C1005 JB 1H 331K-T	B	57.6/10.0
C101	4030016930	S.CER	C1005 JB 1A 104K-T	B	53.0/21.9
C102	4030018890	S.CER	C1005 JB 0J 224K-T	B	106.9/6.8
C103	4030017460	S.CER	C1005 JB 1H 102K-T	B	58.0/13.4
C104	4030017460	S.CER	C1005 JB 1H 102K-T	B	111.7/19.4
C105	4030016930	S.CER	C1005 JB 1A 104K-T	B	44.4/24.3
C108	4550007080	S.TAN	TEESVA 1C 106M8R	B	9.5/17.4
C109	4030016970	S.CER	C1005 JB 1E 223K-T	B	36.1/20.9
J1	6450002210	CON	3017-8821 <KIN>		
J3	6510028390	S.CON	04-6294-036-000-800	B	66.0/16.9
DS1	5030003530	LCD	L1-1207TVM-1 <TES>		
DS3	5040003470	S.LED	HT-297UY/UYG <KOU>	T	44.0/20.0
DS5	5040003470	S.LED	HT-297UY/UYG <KOU>	T	55.0/20.0
DS6	5040003470	S.LED	HT-297UY/UYG <KOU>	T	66.0/20.0
DS7	5040003470	S.LED	HT-297UY/UYG <KOU>	T	77.0/20.0
DS8	5040003470	S.LED	HT-297UY/UYG <KOU>	T	88.0/20.0
DS9	5040003470	S.LED	HT-297UY/UYG <KOU>	T	99.0/20.0
S1	2260002740	S.SWI	LS8J2M-T	T	10.0/30.6
S2	2260002740	S.SWI	LS8J2M-T	T	101.5/4.8
S3	2260002740	S.SWI	LS8J2M-T	T	89.5/4.8
S4	2260002740	S.SWI	LS8J2M-T	T	77.5/4.8
S5	2260002740	S.SWI	LS8J2M-T	T	65.5/4.8
S6	2260002740	S.SWI	LS8J2M-T	T	53.5/4.8
S7	2260002740	S.SWI	LS8J2M-T	T	41.5/4.8
S8	2260002740	S.SWI	LS8J2M-T	T	10.0/21.3
S9	2250000700	ENC	EC12E24204A8		
S10	2260002740	S.SWI	LS8J2M-T	T	111.8/4.8
EP1	6910018460	S.BEA	MMZ1005Y102C-T	B	15.6/13.2
EP2	6910012350	S.BEA	MMZ1608Y 102BT	T	11.5/14.6
EP3	6910018460	S.BEA	MMZ1005Y102C-T	B	12.2/15.4
EP4	6910018460	S.BEA	MMZ1005Y102C-T	T	9.7/14.4
EP5	6910018460	S.BEA	MMZ1005Y102C-T	B	8.4/8.5
EP6	6910018460	S.BEA	MMZ1005Y102C-T	B	7.1/8.5
EP7	6910018460	S.BEA	MMZ1005Y102C-T	T	6.4/14.7
EP8	6910012350	S.BEA	MMZ1608Y 102BT	B	4.6/8.0
EP9	8930084270	LCD	SRCN-3251-SP-N-W		

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
IC1	1140005991	S.IC	MB15A02PFV1-G-BND-ERE1	B	56.65/16.5
IC2	1130011760	S.IC	CD4094BPWR	B	44.3/4.4
IC3	1110007720	S.IC	AA32416A <SLVJ>	B	95.9/11.4
IC4	1130007021	S.IC	TC7S66FU(TE85LF)	T	57.1/17.6
IC5	1110007550	S.IC	R2A20178NP	T	74.3/12.8
IC6	1180001252	S.IC	TA7808F(TE16L1NQ)	B	10.0/38.9
IC7	1110003091	IC	LA4425A-E		
IC8	1180003470	S.REG	NJM2835DL1-05-TE1-#ZZZB	B	11.2/48.5
IC9	1110006470	S.IC	LMV324IPWR	T	77.9/26.5
IC10	1110006870	S.IC	UPC2709TB-E3	B	40.7/26.3
Q1	1530002851	S.TRA	2SC4116-BL(TE85RF)	T	88.4/14.8
Q2	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	15.5/30.8
Q3	1510000591	S.TRA	2SA1362-Y(TE85LF)	B	15.8/33.8
Q4	1590004050	S.TRA	LDTA144EET1G <SLVJ>	T	99.3/3.9
Q5	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	35.0/29.9
Q6	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	29.7/15.6
Q7	1530004140	S.TRA	L2SC4081RT1G <SLVJ>	B	31.7/17.7
Q8	1590004040	S.TRA	LDTA123YET1G <SLVJ>	B	31.8/21.3
Q9	1590004070	S.TRA	LDTC144EET1G <SLVJ>	B	88.9/6.5
Q10	1560000541	S.FET	2SK880-Y(T5RICOMF)	T	56.9/13.1
Q11	1590004070	S.TRA	LDTC144EET1G <SLVJ>	T	43.9/11.9
Q12	1590004040	S.TRA	LDTA123YET1G <SLVJ>	B	11.0/29.4
Q13	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	34.8/15.7
Q14	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	36.3/21.1
Q15	1590004040	S.TRA	LDTA123YET1G <SLVJ>	B	11.0/31.5
Q16	1590004070	S.TRA	LDTC144EET1G <SLVJ>	B	12.3/33.6
Q17	1530002931	S.TRA	2SC4228-T1 Y45 (R45)	B	34.2/25.7
Q20	1530003091	S.TRA	2SC4213-B(TE85RF)	B	21.1/4.3
Q21	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	T	22.6/45.2
Q22	1560001241	S.FET	RD01MUS1-T113	T	30.4/49.4
Q23	1520000460	S.TRA	2SB1132 T100 R	B	19.0/52.5
Q24	1520000460	S.TRA	2SB1132 T100 R	B	19.0/44.7
Q25	1590004690	S.TRA	LDTC143ZET1G <SLVJ>	B	21.1/39.0
Q26	1560001770	S.FET	RD04HMS2-T112	T	29.6/55.9
Q27	1530002921	S.TRA	2SC4226-T1 Y25 (R25)	B	86.7/13.6
Q28	1580000731	S.FET	3SK293(TE85LF)	B	82.4/21.6
Q29	1560001780	S.FET	RD70HUF2-T1105	B	60.0/54.7
Q31	1590004050	S.TRA	LDTA144EET1G <SLVJ>	T	71.1/22.7
Q32	1580000731	S.FET	3SK293(TE85LF)	B	102.1/22.6
Q33	1560001790	S.FET	LN2306LT1G <SLVJ>	T	27.2/9.8
Q34	1590004070	S.TRA	LDTC144EET1G <SLVJ>	T	29.0/7.0
Q35	1560001790	S.FET	LN2306LT1G <SLVJ>	T	25.5/6.6
Q36	1560001790	S.FET	LN2306LT1G <SLVJ>	T	21.1/23.0
Q37	1560001790	S.FET	LN2306LT1G <SLVJ>	T	20.4/26.3
Q38	1590004060	S.TRA	LDTC114EET1G <SLVJ>	T	23.8/23.9
Q39	1590004070	S.TRA	LDTC144EET1G <SLVJ>	B	10.8/27.4
D1	1750001790	S.DIO	1SS390 TE61	T	104.2/9.2
D2	1750001790	S.DIO	1SS390 TE61	T	108.6/9.8
D3	1750001810	S.DIO	L1SS400T1G <SLVJ>	B	55.4/20.0
D4	1750001810	S.DIO	L1SS400T1G <SLVJ>	B	33.1/30.0
D5	1750001790	S.DIO	1SS390 TE61	T	99.7/7.7
D6	1750001790	S.DIO	1SS390 TE61	T	99.7/10.2
D7	1750000721	S.VAR	HVC375BTRF-E	B	43.1/15.8
D8	1750000721	S.VAR	HVC375BTRF-E	B	44.9/13.6
D9	1750001570	S.VAR	HVL355CMKRF-E	B	41.5/13.4
D10	1750000721	S.VAR	HVC375BTRF-E	B	43.4/20.2
D11	1750000721	S.VAR	HVC375BTRF-E	B	43.9/18.4
D12	1750001910	S.DIO	HVD144AKRF-E	B	45.3/29.1
D13	1750001910	S.DIO	HVD144AKRF-E	B	43.7/29.8
D16	1790001950	S.VAR	VC060318A400RP	T	37.0/67.9
D17	1750001820	S.DIO	LRB706F-40T1G <SLVJ>	B	85.2/9.1
D19	1710001300	DIO	P6KA18AHE3/54 <TOMEN>		
D22	1750000711	S.VAR	HVC350BTRF-E	B	95.0/20.4
D23	1750000711	S.VAR	HVC350BTRF-E	B	112.4/20.8
D24	1750002190	S.DIO	JDP2S12CR(TE85LQ)	T	101.2/36.2
D25	1750002190	S.DIO	JDP2S12CR(TE85LQ)	T	101.2/34.1
D26	1750001810	S.DIO	L1SS400T1G <SLVJ>	B	109.6/25.1
D27	1750001820	S.DIO	LRB706F-40T1G <SLVJ>	B	104.9/43.4
D28	1750001810	S.DIO	L1SS400T1G <SLVJ>	T	108.0/20.4
D29	1710000871	S.DIO	HVU131TRF-E	T	112.9/22.7
D30	1710000871	S.DIO	HVU131TRF-E	T	113.3/32.5
D31	1710000871	S.DIO	HVU131TRF-E	T	113.3/30.8
D32	1710000871	S.DIO	HVU131TRF-E	T	113.3/29.0
D33	1750001820	S.DIO	LRB706F-40T1G <SLVJ>	B	99.5/47.1
D34	1750001780	S.VAR	HVB350BYPTL-E	B	90.5/20.0
D35	1750001810	S.DIO	L1SS400T1G <SLVJ>	T	99.8/22.5
FI1	2020002380	CER	LT450FW <JJE>		
FI2	2020002510	CER	LTW450HT <JJE>		
FI3	2030000870	S.MON	MFT46.3P3 46.350 MHz (FL-442)	B	80.6/14.0
X1	6050012830	S.XTA	CR-875 TTS14VSB-A3 15.3 MHz	T	64.7/14.0
X2	6070000300	S.DIS	JTBM450CX24 <JJE>	T	93.5/5.2
L1	6190002030	S.COI	MLG1608S 1R0J-T	T	90.35/15.5
L2	6200012170	S.COI	MLG1608S R18J-T	T	93.2/14.8
L3	6200013740	S.COI	MLG1608S R47J-T	B	44.9/16.1
L4	6200013740	S.COI	MLG1608S R47J-T	B	45.2/19.8
L5	6200011050	S.COI	C2012C-R12G-A	B	39.8/14.5
L6	6200009890	S.COI	C2012C-82NG-A	B	41.1/19.1
L7	6200011031	S.COI	ELJRF R10JFB	B	36.9/26.1
L9	6190002030	S.COI	MLG1608S 1R0J-T	B	43.8/26.3
L11	6200007871	S.COI	ELJRF 39NJFB	B	44.3/28.4
L12	6200011011	S.COI	ELJRF 68NJFB	T	21.5/47.0
L13	6200007891	S.COI	ELJRF 27NJFB	T	26.4/52.4
L14	6200013100	S.COI	0.45-1.5-5TL 18.3N <COMO>	T	35.4/61.0
L15	6190002030	S.COI	MLG1608S 1R0J-T	B	88.7/12.9

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
L22	6200011031	S.COI	ELJRF R10JFB	B	81.6/23.9
L23	6200012860	S.COI	0.20-0.7-4TR 6.5N <COMO>	B	44.7/51.6
L24	6200012860	S.COI	0.20-0.7-4TR 6.5N <COMO>	B	44.7/57.9
L25	6200011090	S.COI	C2012C-R56J-A	B	77.9/20.3
L26	6200010160	S.COI	AS080440-22N	T	80.6/60.2
L27	6200009890	S.COI	C2012C-82NG-A	T	89.4/21.7
L28	6200009890	S.COI	C2012C-82NG-A	T	92.7/21.7
L29	6110004080	COI	LA-630		
L30	6200009930	S.COI	C2012C-68NG-A	T	97.5/22.4
L31	6200010150	S.COI	AS080340-15N	T	89.6/48.3
L32	6200009920	S.COI	C2012C-R10G-A	B	108.7/23.4
L33	6200010420	S.COI	FHW1210HC 1R0JGT <JJE>	T	90.5/35.3
L34	6200012460	S.COI	0.30-1.7-8TL 54N <COMO>	T	111.2/19.7
L36	6200010050	S.COI	AS080547-47N	B	110.0/37.2
L37	6200012760	S.COI	0.35-1.6-7TL 37.5N <COMO>	T	111.5/26.3
L38	6200007370	S.COI	ELJFC R82K-F	B	100.8/44.5
L39	6200010050	S.COI	AS080547-47N	B	110.1/45.7
L40	6200010060	S.COI	AS080647-56N	T	108.5/36.2
L41	6200010060	S.COI	AS080647-56N	B	107.9/52.5
L42	6200010060	S.COI	AS080647-56N	B	107.0/58.8
R2	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	59.0/10.4
R4	7030007310	S.RES	ERJ2GEJ 155 X (1.5M)	T	68.7/16.1
R5	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	68.7/15.2
R6	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	68.7/12.8
R7	7030005160	S.RES	ERJ2GEJ 105 X (1M)	T	68.2/14.0
R9	7030006610	S.RES	ERJ2GEJ 394 X (390K)	T	66.3/16.9
R10	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	16.7/28.5
R11	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	88.4/11.8
R12	7030007060	S.RES	ERJ2GEJ 684X (680K)	T	87.9/16.5
R13	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	13.8/33.8
R14	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	13.8/32.2
R16	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	60.3/15.6
R17	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	102.2/9.1
R22	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	110.3/9.5
R23	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	106.8/9.1
R25	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	32.1/29.3
R26	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	57.0/20.1
R27	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	30.3/13.3
R28	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	98.6/6.2
R29	7030007310	S.RES	ERJ2GEJ 155 X (1.5M)	B	53.7/20.1
R31	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	99.1/13.0
R32	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	99.9/1.5
R33	7030008290	S.RES	ERJ2GEJ 183 X (18K)	T	98.2/9.3
R34	7410001220	S.ARR	EXB28V103JX	B	62.3/18.4
R36	7030005120	S.RES	ERJ2GEJ 102 X (1K)	B	31.8/19.5
R37	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	98.9/8.1
R38	7030005030	S.RES	ERJ2GEJ 152 X (1.5K)	T	100.0/13.2
R39	7030008410	S.RES	ERJ2GEJ 392 X (3.9K)	B	97.2/6.2
R40	7030005220	S.RES	ERJ2GEJ 223 X (22K)	B	99.2/5.3
R41	7030005000	S.RES	ERJ2GEJ 471 X (470)	B	93.3/7.7
R43	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	43.3/7.7
R44	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	53.8/17.1
R46	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	57.1/14.8
R47	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	90.8/6.5
R48	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	52.2/17.1
R49	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	90.7/10.2
R50	7030004990	S.RES	ERJ2GEJ 221 X (220)	T	52.2/18.0
R51	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	59.1/13.3
R53	7030004990	S.RES	ERJ2GEJ 221 X (220)	B	89.5/10.1
R54	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	58.3/20.3
R55	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	49.7/17.5
R56	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	55.0/13.5
R57	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	91.2/9.0
R58	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	46.1/12.7
R59	7030005060	S.RES	ERJ2GEJ 333 X (33K)	T	47.3/13.2
R60	7030007570	S.RES	ERJ2GEJ 122 X (1.2K)	T	46.8/18.4
R61	7030005310	S.RES	ERJ2GEJ 124 X (120K)	T	44.5/17.6
R62	7030007340	S.RES	ERJ2GEJ 153 X (15K)	T	44.1/16.4
R63	7030012260	S.RES	ERJ2RKD 4703X (470K)	T	45.7/14.1
R64	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	42.4/14.2
R65	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	74.6/8.2
R66	7030009280	S.RES	ERJ2GEJ 391 X	B	34.0/17.6
R67	7030007350	S.RES	ERJ2GEJ 393 X (39K)	B	36.6/13.7
R68	7030005050	S.RES	ERJ2GEJ 103 X (10K)	B	36.6/15.3
R69	7030008260	S.RES	RR0510P-393-D (39K)	B	38.0/19.0
R70	7030005820	S.RES	RR0510P-103-D (10K)	B	38.0/20.6
R71	7030009270	S.RES	ERJ2GEJ 821 X (820)	B	32.8/13.4
R72	7030005000	S.RES	ERJ2GEJ 471 X (470)	T	73.3/8.6
R73	7030009270	S.RES	ERJ2GEJ 821 X (820)	B	36.7/18.0
R74	7030009280	S.RES	ERJ2GEJ 391 X	B	34.2/22.0
R76	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	36.0/25.2
R78	7030007270	S.RES	ERJ2GEJ 151 X (150)	B	36.0/26.8
R79	7030009290	S.RES	ERJ2GEJ 562 X (5.6K)	T	76.6/8.0
R80	7030009290	S.RES	ERJ2GEJ 562 X (5.6K)	T	76.6/6.4
R84	7030005580	S.RES	ERJ2GEJ 560 X (56)	B	38.7/26.1
R85	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	25.5/5.0
R86	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	44.8/30.8
R87	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	T	21.7/39.2
R88	7030005710	S.RES	ERJ2GEJ 121 X (120)	T	23.2/40.8
R89	7030004970	S.RES	ERJ2GEJ 470 X (47)	T	22.0/41.3
R90	7030005230	S.RES	ERJ2GEJ 334 X (330K)	B	18.8/2.9
R91	7030005710	S.RES	ERJ2GEJ 121 X (120)	T	23.2/41.7
R92	7030005600	S.RES	ERJ2GEJ 273 X (27K)	B	24.4/4.1
R93	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	19.2/4.1
R94	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	T	20.4/43.6
R96	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	21.9/49.2
R97	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	T	20.9/44.8
R98	7030009160	S.RES	ERJ2GEJ 181 X (180)	T	24.7/44.5
R99	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	33.9/49.2
R100	7030005060	S.RES	ERJ2GEJ 333 X (33K)	T	33.9/47.4
R102	7030005590	S.RES	ERJ2GEJ 680 X (68)	T	32.9/46.5
R105	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	21.4/41.6
R106	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	33.9/50.1

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REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
R108	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	26.4/51.5
R109	7030005060	S.RES	ERJ2GEJ 333 X (33K)	T	34.3/53.1
R110	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	22.1/49.0
R111	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	19.0/56.2
R112	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	19.8/41.5
R114	7030007250	S.RES	ERJ2GEJ 220 X (22)	T	33.4/53.1
R115	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	B	78.0/24.2
R116	7030005000	S.RES	ERJ2GEJ 471 X (470)	B	88.3/10.8
R117	7030000100	S.RES	MCR10EZHJ 4.7 (4R7)	B	9.6/23.2
R118	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	86.2/11.9
R119	7030010090	S.RES	ERJ2GEJ 180 X (18)	B	46.2/28.8
R120	7030005590	S.RES	ERJ2GEJ 680 X (68)	B	46.7/30.0
R121	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	13.9/62.0
R122	7030008370	S.RES	ERJ2GEJ 561 X (560)	B	83.2/9.0
R124	7030010090	S.RES	ERJ2GEJ 180 X (18)	B	47.1/28.8
R125	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	72.5/23.3
R126	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	77.8/18.3
R127	7030004970	S.RES	ERJ2GEJ 470 X (47)	B	85.2/23.6
R128	7030000180	S.RES	MCR10EZHJ 22 (220)	T	48.7/50.9
R129	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/50.1
R130	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/59.3
R131	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	B	80.4/21.0
R132	7030000180	S.RES	MCR10EZHJ 22 (220)	T	48.7/58.6
R133	7030005590	S.RES	ERJ2GEJ 680 X (68)	B	83.3/19.5
R134	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	50.0/60.6
R135	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	50.0/49.0
R136	7030005100	S.RES	ERJ2GEJ 154 X (150K)	B	84.3/22.7
R137	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	84.3/21.1
R138	7030005310	S.RES	ERJ2GEJ 124 X (120K)	B	85.2/21.9
R139	7030005080	S.RES	ERJ2GEJ 823 X (82K)	B	87.3/21.6
R144	7030007300	S.RES	ERJ2GEJ 332 X (3.3K)	T	79.0/22.3
R145	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	88.7/20.6
R146	7520000241	S.POS	PRF18BC471QB5RB	T	66.0/45.4
R147	7030005170	S.RES	ERJ2GEJ 474 X (470K)	T	73.4/24.9
R149	7030010040	S.RES	ERJ2GEJ-JPW	T	71.0/26.2
R150	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	77.4/23.2
R152	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	92.2/20.6
R153	7030008410	S.RES	ERJ2GEJ 392 X (3.9K)	T	71.6/24.7
R156	7030012710	S.RES	ERA2AEB 273X (27K)	T	80.1/32.7
R157	7030012160	S.RES	ERJM1WSF6M0U	T	71.1/66.8
R159	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	96.1/20.8
R160	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	83.5/24.9
R161	7030004970	S.RES	ERJ2GEJ 470 X (47)	B	97.9/23.6
R162	7030008370	S.RES	ERJ2GEJ 561 X (560)	B	100.1/22.4
R163	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	82.3/24.4
R164	7030004980	S.RES	ERJ2GEJ 101 X (100)	B	101.3/20.5
R165	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	83.2/23.7
R166	7030012260	S.RES	ERJ2RKD 4703X (470K)	T	81.3/29.7
R167	7030012310	S.RES	ERJ2RKD 3303X (330K)	T	82.5/30.2
R169	7030005110	S.RES	ERJ2GEJ 224 X (220K)	B	105.8/20.4
R170	7030012260	S.RES	ERJ2RKD 4703X (470K)	T	84.3/28.5
R173	7030008290	S.RES	ERJ2GEJ 183 X (18K)	B	106.3/21.6
R174	7030012700	S.RES	ERA2AEB 392X (3.9K)	T	78.9/29.7
R175	7030012700	S.RES	ERA2AEB 392X (3.9K)	T	83.4/27.6
R176	7030010040	S.RES	ERJ2GEJ-JPW	T	85.5/29.7
R177	7030005090	S.RES	ERJ2GEJ 104 X (100K)	B	105.1/22.6
R178	7030005310	S.RES	ERJ2GEJ 124 X (120K)	B	104.2/22.6
R179	7030012710	S.RES	ERA2AEB 273X (27K)	T	85.2/28.5
R180	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	70.4/24.3
R181	7030005600	S.RES	ERJ2GEJ 273 X (27K)	T	83.5/25.8
R182	7030006070	S.RES	ERJ12YJ101U (100)	T	85.4/35.2
R183	7030005240	S.RES	ERJ2GEJ 473 X (47K)	B	110.8/19.9
R184	7030005040	S.RES	ERJ2GEJ 472 X (4.7K)	T	68.7/23.4
R185	7030008010	S.RES	ERJ2GEJ 123 X (12K)	B	111.6/25.1
R186	7030005210	S.RES	ERJ2GEJ 822 X (8.2K)	B	103.5/45.2
R187	7030005210	S.RES	ERJ2GEJ 822 X (8.2K)	B	102.3/46.3
R188	7030005080	S.RES	ERJ2GEJ 823 X (82K)	B	112.2/62.6
R189	7030007250	S.RES	ERJ2GEJ 220 X (22)	B	51.7/15.5
R191	7030008410	S.RES	ERJ2GEJ 392 X (3.9K)	B	98.1/3.2
R192	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	98.3/2.4
R195	7030008240	S.RES	ERJ12Y0R00U	T	37.7/56.1
R196	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/51.3
R197	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	B	48.9/58.1
R198	7030005530	S.RES	ERJ2GEJ 100 X (10)	B	106.3/22.5
R199	7030007350	S.RES	ERJ2GEJ 393 X (39K)	T	47.5/61.8
R200	7030007350	S.RES	ERJ2GEJ 393 X (39K)	T	47.5/47.6
R201	7030010040	S.RES	ERJ2GEJ-JPW	T	51.4/43.6
R202	7030010040	S.RES	ERJ2GEJ-JPW	B	78.0/23.3
R204	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	75.6/8.2
R206	7030012260	S.RES	ERJ2RKD 4703X (470K)	B	18.6/41.0
R207	7030012270	S.RES	ERJ2RKD 1203X (120K)	B	18.6/39.4
R208	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	40.7/5.9
R209	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	27.5/6.5
R210	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	25.7/11.3
R211	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	29.5/8.4
R212	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	21.4/40.7
R213	7030007290	S.RES	ERJ2GEJ 222 X (2.2K)	B	21.2/49.0
R214	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	21.5/48.0
R215	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	22.8/25.4
R216	7030005050	S.RES	ERJ2GEJ 103 X (10K)	T	19.4/21.5
R217	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	23.3/22.2
R218	7030000100	S.RES	MCR10EZHJ 4.7 (4R7)	B	14.3/18.9
R220	7030005090	S.RES	ERJ2GEJ 104 X (100K)	T	95.9/10.2
R225	7030010040	S.RES	ERJ2GEJ-JPW	T	75.4/29.7
R230	7030010040	S.RES	ERJ2GEJ-JPW	B	38.8/24.5
R231	7030005580	S.RES	ERJ2GEJ 560 X (56)	B	38.2/27.7
R233	7030007340	S.RES	ERJ2GEJ 153 X (15K)	T	71.5/9.0
R234	7030005600	S.RES	ERJ2GEJ 273 X (27K)	B	24.3/5.6
R235	7030005120	S.RES	ERJ2GEJ 102 X (1K)	T	64.8/44.3
C2	4030017460	S.CER	C1005 JB 1H 102K-T	B	53.8/8.3
C3	4030020000	S.CER	C1005 JB 1A 105K-T	T	70.0/14.0
C4	4030020000	S.CER	C1005 JB 1A 105K-T	T	69.1/14.0
C8	4030019990	S.CER	C1005 JB 1C 104K-T	T	65.5/11.1

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C9	4030017430	S.CER C1005 CH 1H 101J-T	T	86.3/16.5
C10	4030017460	S.CER C1005 JB 1H 102K-T	B	10.6/34.3
C11	4030019990	S.CER C1005 JB 1C 104K-T	B	15.5/28.9
C12	4030016790	S.CER C1005 JB 1E 103K-T	T	87.9/10.6
C13	4030017460	S.CER C1005 JB 1H 102K-T	T	61.2/12.9
C14	4030017380	S.CER C1005 CH 1H 050B-T	T	91.4/14.3
C15	4030019560	S.CER GRM21BB31C106KE15L	B	18.4/34.8
C16	4030016790	S.CER C1005 JB 1E 103K-T	T	87.9/13.0
C17	4030017580	S.CER C1005 CH 1H 060C-T	T	91.9/15.5
C18	4030017500	S.CER C1005 CH 1H 560J-T	T	94.3/14.3
C19	4030016790	S.CER C1005 JB 1E 103K-T	B	66.8/8.3
C21	4030017620	S.CER C1005 CH 1H 100C-T	T	61.2/15.6
C22	4030017460	S.CER C1005 JB 1H 102K-T	B	53.3/5.3
C23	4030017460	S.CER C1005 JB 1H 102K-T	B	68.3/5.3
C24	4030017460	S.CER C1005 JB 1H 102K-T	B	56.1/13.2
C26	4030017360	S.CER C1005 CH 1H 030B-T	T	94.6/15.5
C27	4030017460	S.CER C1005 JB 1H 102K-T	B	61.8/8.3
C29	4030016930	S.CER C1005 JB 1A 104K-T	B	40.9/7.7
C30	4030016950	S.CER C1005 JB 1A 473K-T	T	111.5/9.1
C31	4030017460	S.CER C1005 JB 1H 102K-T	B	65.8/5.3
C33	4030017460	S.CER C1005 JB 1H 102K-T	B	55.8/5.3
C34	4030017460	S.CER C1005 JB 1H 102K-T	B	31.2/29.3
C35	4030017730	S.CER C1005 JB 1H 471K-T	B	54.6/21.4
C36	4030017460	S.CER C1005 JB 1H 102K-T	B	51.7/17.1
C37	4030017420	S.CER C1005 CH 1H 470J-T	B	55.8/21.0
C39	4030019990	S.CER C1005 JB 1C 104K-T	B	50.5/16.0
C40	4030017460	S.CER C1005 JB 1H 102K-T	B	29.4/13.3
C41	4030019990	S.CER C1005 JB 1C 104K-T	B	60.5/20.1
C42	4510009950	S.ELE EEEHC1C470P	T	29.6/32.5
C43	4030020000	S.CER C1005 JB 1A 105K-T	B	51.7/13.9
C45	4030017460	S.CER C1005 JB 1H 102K-T	B	37.1/30.8
C46	4030020000	S.CER C1005 JB 1A 105K-T	B	50.5/15.1
C49	4030019990	S.CER C1005 JB 1C 104K-T	T	102.2/10.0
C50	4030019990	S.CER C1005 JB 1C 104K-T	T	98.6/10.5
C51	4030019990	S.CER C1005 JB 1C 104K-T	B	97.1/8.1
C52	4030017720	S.CER C1005 JB 1H 331K-T	B	99.3/6.9
C53	4030017720	S.CER C1005 JB 1H 331K-T	B	98.4/6.9
C54	4030016790	S.CER C1005 JB 1E 103K-T	B	98.2/15.1
C55	4030019560	S.CER GRM21BB31C106KE15L	T	91.6/10.7
C56	4030020000	S.CER C1005 JB 1A 105K-T	B	99.1/15.1
C57	4030017460	S.CER C1005 JB 1H 102K-T	T	90.0/10.1
C58	4030017460	S.CER C1005 JB 1H 102K-T	B	93.7/6.5
C59	4030017460	S.CER C1005 JB 1H 102K-T	T	57.1/15.7
C60	4030017460	S.CER C1005 JB 1H 102K-T	B	94.2/7.7
C61	4030019990	S.CER C1005 JB 1C 104K-T	B	87.3/6.5
C62	4030017460	S.CER C1005 JB 1H 102K-T	B	91.6/12.6
C63	4030019990	S.CER C1005 JB 1C 104K-T	T	56.3/19.8
C64	4030017460	S.CER C1005 JB 1H 102K-T	B	97.0/14.7
C65	4030019990	S.CER C1005 JB 1C 104K-T	T	58.3/15.3
C66	4030019990	S.CER C1005 JB 1C 104K-T	B	91.3/7.7
C67	4550000530	S.TAN TEESVA 1V 104M8R	T	53.5/14.1
C68	4030017460	S.CER C1005 JB 1H 102K-T	T	59.1/12.4
C69	4030017430	S.CER C1005 CH 1H 101J-T	B	91.6/10.2
C70	4030017040	S.CER C1005 JB 1A 333K-T	T	95.9/11.1
C71	4030017460	S.CER C1005 JB 1H 102K-T	T	58.3/19.4
C74	4550002890	S.TAN TEESVA 1A 225M8R	T	49.3/14.1
C75	4030017460	S.CER C1005 JB 1H 102K-T	T	47.3/12.3
C76	4030017420	S.CER C1005 CH 1H 470J-T	T	43.6/17.6
C77	4030017460	S.CER C1005 JB 1H 102K-T	T	47.3/14.1
C78	4030017420	S.CER C1005 CH 1H 470J-T	B	47.1/19.4
C79	4030020000	S.CER C1005 JB 1A 105K-T	T	44.5/15.2
C80	4550000560	S.TAN TEESVA 1V 334M8R	B	46.6/14.9
C81	4030016790	S.CER C1005 JB 1E 103K-T	B	91.0/13.8
C82	4030017460	S.CER C1005 JB 1H 102K-T	B	13.0/29.4
C83	4030017440	S.CER C1005 CH 1H 221J-T	T	44.5/13.6
C85	4030017750	S.CER C1005 JB 1H 122K-T	B	43.3/13.2
C86	4030017530	S.CER C1005 CH 1H 0R5B-T	B	41.4/15.1
C87	4030017460	S.CER C1005 JB 1H 102K-T	B	34.0/18.5
C88	4030017580	S.CER C1005 CH 1H 060C-T	B	39.2/20.2
C89	4030017580	S.CER C1005 CH 1H 060C-T	B	37.9/14.8
C90	4030017460	S.CER C1005 JB 1H 102K-T	B	92.4/7.0
C91	4030016930	S.CER C1005 JB 1A 104K-T	T	73.4/16.9
C92	4030019990	S.CER C1005 JB 1C 104K-T	B	33.0/23.3
C93	4030017590	S.CER C1005 CH 1H 070C-T	B	34.9/13.8
C94	4030017420	S.CER C1005 CH 1H 470J-T	B	33.7/13.4
C95	4030017380	S.CER C1005 CH 1H 050B-T	B	36.3/19.2
C96	4030018010	S.CER C1005 CH 1H 360J-T	B	35.8/18.0
C97	4030016790	S.CER C1005 JB 1E 103K-T	T	72.8/7.4
C98	4030016930	S.CER C1005 JB 1A 104K-T	T	75.7/17.3
C99	4030017460	S.CER C1005 JB 1H 102K-T	B	37.9/15.7
C100	4030017460	S.CER C1005 JB 1H 102K-T	B	39.2/21.1
C101	4030017540	S.CER C1005 CH 1H R75B-T	B	34.5/20.6
C102	4030019990	S.CER C1005 JB 1C 104K-T	B	37.0/16.6
C103	4030017460	S.CER C1005 JB 1H 102K-T	B	34.2/22.9
C104	4030017540	S.CER C1005 CH 1H R75B-T	B	33.1/15.3
C105	4030017460	S.CER C1005 JB 1H 102K-T	B	32.5/25.2
C106	4030017460	S.CER C1005 JB 1H 102K-T	B	40.0/22.7
C112	4030017460	S.CER C1005 JB 1H 102K-T	B	46.9/25.9
C113	4030017460	S.CER C1005 JB 1H 102K-T	B	39.4/28.0
C116	4030019560	S.CER GRM21BB31C106KE15L	T	78.0/6.1
C117	4030017460	S.CER C1005 JB 1H 102K-T	B	42.7/26.6
C120	4030017460	S.CER C1005 JB 1H 102K-T	T	75.6/6.6
C122	4030017630	S.CER C1005 CH 1H 120J-T	B	43.1/28.0
C123	4030017630	S.CER C1005 CH 1H 120J-T	B	43.1/28.9
C124	4030017460	S.CER C1005 JB 1H 102K-T	B	16.8/37.1
C125	4030017460	S.CER C1005 JB 1H 102K-T	B	44.8/26.8
C126	4510010010	S.ELE 25 CE 220 LX	T	9.5/34.2
C127	4030017460	S.CER C1005 JB 1H 102K-T	T	20.5/39.6
C128	4030017460	S.CER C1005 JB 1H 102K-T	T	22.9/39.6
C129	4510010010	S.ELE 25 CE 220 LX	T	18.8/34.2
C130	4030017460	S.CER C1005 JB 1H 102K-T	B	16.8/40.0
C131	4030017460	S.CER C1005 JB 1H 102K-T	B	25.5/2.4
C132	4030017460	S.CER C1005 JB 1H 102K-T	B	17.7/40.0
C134	4030017650	S.CER C1005 CH 1H 270J-T	T	22.0/42.9
C135	4030018900	S.CER C1005 JB 0J 474K-T	B	18.3/4.1

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REF NO.	PARTS NO.	DESCRIPTION	M.	H/V LOCATION
C137	4030017460	S.CER C1005 JB 1H 102K-T	T	36.0/49.8
C138	4030017460	S.CER C1005 JB 1H 102K-T	T	19.8/49.6
C139	4030017460	S.CER C1005 JB 1H 102K-T	T	24.7/43.6
C140	4030017780	S.CER C1005 JB 1H 472K-T	B	23.2/4.3
C141	4030018900	S.CER C1005 JB 0J 474K-T	B	22.7/3.1
C142	4030017430	S.CER C1005 CH 1H 101J-T	T	23.1/47.0
C143	4030017420	S.CER C1005 CH 1H 470J-T	B	36.3/50.7
C144	4030017730	S.CER C1005 JB 1H 471K-T	B	21.1/6.4
C145	4030016790	S.CER C1005 JB 1E 103K-T	T	33.9/48.3
C148	4030017460	S.CER C1005 JB 1H 102K-T	T	34.1/46.2
C149	4030016930	S.CER C1005 JB 1A 104K-T	T	73.7/22.8
C150	4510010010	S.ELE 25 CE 220 LX	T	32.0/14.5
C151	4030017460	S.CER C1005 JB 1H 102K-T	B	22.7/46.2
C152	4030017460	S.CER C1005 JB 1H 102K-T	T	23.2/51.5
C156	4030017460	S.CER C1005 JB 1H 102K-T	B	13.3/42.7
C157	4030017460	S.CER C1005 JB 1H 102K-T	B	85.2/25.2
C159	4030017420	S.CER C1005 CH 1H 470J-T	T	33.9/51.0
C160	4030017430	S.CER C1005 CH 1H 101J-T	T	27.7/52.0
C161	4030017460	S.CER C1005 JB 1H 102K-T	T	25.1/50.3
C162	4030019990	S.CER C1005 JB 1C 104K-T	B	88.6/14.6
C163	4030017460	S.CER C1005 JB 1H 102K-T	T	33.9/51.9
C164	4510010230	S.ELE 10 CE 1000 LX	T	12.6/23.5
C165	4030019560	S.CER GRM21BB31C106KE15L	B	13.6/44.1
C166	4030017460	S.CER C1005 JB 1H 102K-T	B	87.1/10.3
C167	4030017600	S.CER C1005 CH 1H 080C-T	B	87.4/11.6
C170	4030019990	S.CER C1005 JB 1C 104K-T	B	7.9/22.2
C171	4030017460	S.CER C1005 JB 1H 102K-T	B	46.7/30.9
C172	4030017460	S.CER C1005 JB 1H 102K-T	T	36.9/66.9
C174	4030016790	S.CER C1005 JB 1E 103K-T	B	86.3/15.4
C175	4030016790	S.CER C1005 JB 1E 103K-T	B	85.5/11.0
C177	4030017460	S.CER C1005 JB 1H 102K-T	B	14.6/48.5
C178	4030017460	S.CER C1005 JB 1H 102K-T	T	13.1/51.5
C179	4030017460	S.CER C1005 JB 1H 102K-T	T	37.9/62.1
C182	4030017730	S.CER C1005 JB 1H 471K-T	T	17.3/52.2
C184	4030017460	S.CER C1005 JB 1H 102K-T	T	17.3/53.1
C187	4030017580	S.CER C1005 CH 1H 060C-T	B	84.3/15.3
C189	4030007130	S.CER C1608 CH 1H 101J-T	B	40.5/52.1
C190	4030007130	S.CER C1608 CH 1H 101J-T	B	40.5/57.2
C191	4030017370	S.CER C1005 CH 1H 3R5B-T	B	80.4/23.3
C192	4030009980	S.CER C1608 JB 1H 152K-T	B	45.6/53.9
C193	4030009980	S.CER C1608 JB 1H 152K-T	B	45.6/55.5
C194	4030016790	S.CER C1005 JB 1E 103K-T	B	77.4/16.8
C195	4030017340	S.CER C1005 CH 1H 010B-T	B	79.8/18.9
C196	4030017460	S.CER C1005 JB 1H 102K-T	B	77.5/22.4
C197	4030011600	S.CER C1608 JB 1E 104K-T	T	48.7/48.1
C198	4030016790	S.CER C1005 JB 1E 103K-T	T	84.1/23.7
C199	4030017390	S.CER C1005 CH 1H 180J-T	B	79.5/21.0
C200	4030017460	S.CER C1005 JB 1H 102K-T	B	82.4/19.5
C201	4030007140	S.CER C1608 CH 1H 121J-T	B	48.9/52.5
C202	4030007140	S.CER C1608 CH 1H 121J-T	B	48.9/56.9
C204	4030011600	S.CER C1608 JB 1E 104K-T	T	48.6/61.4
C205	4030017460	S.CER C1005 JB 1H 102K-T	B	82.8/23.3
C208	4030020220	S.CER GQM2192C1H470JB01D	B	74.0/43.7
C209	4030017380	S.CER C1005 CH 1H 050B-T	B	87.3/22.5
C210	4030017460	S.CER C1005 JB 1H 102K-T	T	51.2/48.6
C211	4030019990	S.CER C1005 JB 1C 104K-T	T	77.8/22.0
C213	4030017340	S.CER C1005 CH 1H 010B-T	B	88.5/22.4
C216	4030019410	S.CER GRM31A7U2J471JW31D	T	75.4/61.7
C217	4030017460	S.CER C1005 JB 1H 102K-T	T	64.8/42.7
C218	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/42.8
C219	4030018890	S.CER C1005 JB 0J 224K-T	T	72.5/24.9
C220	4030017460	S.CER C1005 JB 1H 102K-T	T	66.3/42.8
C221	4030017460	S.CER C1005 JB 1H 102K-T	B	88.7/19.0
C222	4030019410	S.CER GRM31A7U2J471JW31D	T	75.4/59.6
C223	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/44.5
C224	4030017680	S.CER C1005 CH 1H 820J-T	B	89.4/22.4
C225	4510010010	S.ELE 25 CE 220 LX	T	81.0/66.9
C226	4030017460	S.CER C1005 JB 1H 102K-T	T	79.0/23.2
C227	4030017530	S.CER C1005 CH 1H 0R5B-T	B	90.6/22.9
C228	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/46.3
C229	4030016790	S.CER C1005 JB 1E 103K-T	B	89.8/13.6
C230	4030017460	S.CER C1005 JB 1H 102K-T	T	76.9/22.0
C232	4030016930	S.CER C1005 JB 1A 104K-T	B	91.8/18.1
C234	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/48.0
C236	4030017680	S.CER C1005 CH 1H 820J-T	B	91.8/22.4
C237	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/49.8
C238	4030017340	S.CER C1005 CH 1H 010B-T	B	92.7/22.4
C239	4030020230	S.CER GQM2192C1H680JB01D	T	74.2/51.5
C240	4030017460	S.CER C1005 JB 1H 102K-T	T	77.0/29.7
C241	4030020210	S.CER GQM2192C2A150JB01D	T	74.2/53.3
C242	4030017550	S.CER C1005 CH 1H 1R5B-T	B	94.0/22.9
C243	4030017460	S.CER C1005 JB 1H 102K-T	T	68.2/22.1
C245	4030020200	S.CER GQM2192C2A8R0CB01D	T	74.1/55.0
C247	4030017460	S.CER C1005 JB 1H 102K-T	B	95.6/18.5
C249	4030017680	S.CER C1005 CH 1H 820J-T	B	95.2/22.4
C250	4030017460	S.CER C1005 JB 1H 102K-T	B	96.1/22.4
C251	4030016790	S.CER C1005 JB 1E 103K-T	B	100.4/20.5
C254	4030011240	S.CER GRM31M2C2H470JV01L (GRM42-6 CH)	T	80.2/47.6
C255	4030017460	S.CER C1005 JB 1H 102K-T	T	81.6/31.8
C256	4030017460	S.CER C1005 JB 1H 102K-T	B	102.2/20.5
C257	4030017460	S.CER C1005 JB 1H 102K-T	T	81.3/30.6
C258	4030017460	S.CER C1005 JB 1H 102K-T	B	97.0/22.0
C260	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	95.7/49.8
C261	4030020000	S.CER C1005 JB 1A 105K-T	B	97.9/22.0
C262	4030017460	S.CER C1005 JB 1H 102K-T	B	106.7/20.4
C263	4030017460	S.CER C1005 JB 1H 102K-T	T	82.5/27.6
C265	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	95.7/47.7
C266	4030011060	S.CER GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	95.7/45.6
C267	4030017460	S.CER C1005 JB 1H 102K-T	T	80.1/30.2
C269	4030019990	S.CER C1005 JB 1C 104K-T	T	82.3/26.0
C270	4030017640	S.CER C1005 CH 1H 150J-T	B	106.3/23.4

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

[MAIN UNIT]

REF NO.	PARTS NO.	DESCRIPTION		M.	H/V LOCATION
C271	4030017460	S.CER	C1005 JB 1H 102K-T	T	78.9/30.6
C272	4030011060	S.CER	GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	92.1/43.5
C274	4030011060	S.CER	GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	92.1/41.4
C275	4030017460	S.CER	C1005 JB 1H 102K-T	T	86.4/27.9
C276	4030017460	S.CER	C1005 JB 1H 102K-T	B	112.0/19.5
C277	4030017460	S.CER	C1005 JB 1H 102K-T	T	84.7/26.2
C278	4030011060	S.CER	GRM31M2C2H4R0CY21L (GRM42-6 CH)	T	92.1/39.3
C279	4030017680	S.CER	C1005 CH 1H 820J-T	B	110.8/21.5
C280	4030017460	S.CER	C1005 JB 1H 102K-T	T	89.0/37.7
C281	4030018940	S.CER	GRM31A7U2J331JW31D	T	98.1/35.9
C282	4030018940	S.CER	GRM31A7U2J331JW31D	T	96.0/35.9
C283	4030018940	S.CER	GRM31A7U2J331JW31D	T	93.7/35.9
C284	4030017460	S.CER	C1005 JB 1H 102K-T	T	68.7/24.3
C285	4030019990	S.CER	C1005 JB 1C 104K-T	T	86.4/28.8
C287	4030017380	S.CER	C1005 CH 1H 050B-T	B	110.8/23.1
C288	4030019420	S.CER	GRM31A7U2J102JW31D	T	104.3/32.0
C291	4030011170	S.CER	GRM31M2C2H180JV01L (GRM42-6 CH)	B	104.3/34.6
C292	4030017460	S.CER	C1005 JB 1H 102K-T	B	111.2/26.3
C293	4030017550	S.CER	C1005 CH 1H 1R5B-T	T	110.2/23.1
C295	4030011020	S.CER	GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	109.1/41.9
C296	4030007020	S.CER	C1608 CH 1H 120J-T	B	104.7/41.5
C298	4030011230	S.CER	GRM31M2C2H390JV01L (GRM42-6 CH)	B	104.3/39.8
C299	4030017460	S.CER	C1005 JB 1H 102K-T	B	101.9/42.4
C300	4030011230	S.CER	GRM31M2C2H390JV01L (GRM42-6 CH)	B	100.3/51.6
C302	4030017390	S.CER	C1005 CH 1H 180J-T	T	108.8/26.9
C303	4030011020	S.CER	GRM31M4C2H1R0CY21L (GRM42-6 CK)	B	103.4/47.8
C304	4030007020	S.CER	C1608 CH 1H 120J-T	B	99.4/49.4
C305	4030011050	S.CER	GRM31M3C2H3R0CY21L (GRM42-6 CJ)	T	98.7/29.9
C306	4030011210	S.CER	GRM31M2C2H330JV01L (GRM42-6 CH)	B	100.3/56.9
C307	4030011160	S.CER	GRM31M2C2H150JV01L (GRM42-6 CH)	B	104.2/63.1
C308	4030017450	S.CER	C1005 JB 1H 271K-T	B	98.6/4.1
C309	4030017460	S.CER	C1005 JB 1H 102K-T	T	97.9/1.2
C310	4030019990	S.CER	C1005 JB 1C 104K-T	T	108.0/8.8
C311	4030019990	S.CER	C1005 JB 1C 104K-T	T	99.7/5.6
C312	4030019990	S.CER	C1005 JB 1C 104K-T	T	100.0/11.8
C313	4030019990	S.CER	C1005 JB 1C 104K-T	T	111.5/10.0
C314	4030007140	S.CER	C1608 CH 1H 121J-T	B	48.9/48.9
C315	4030007140	S.CER	C1608 CH 1H 121J-T	B	48.9/60.5
C319	4510010010	S.ELE	25 CE 220 LX	T	22.4/16.6
C321	4030020000	S.CER	C1005 JB 1A 105K-T	T	23.2/52.4
C322	4030019990	S.CER	C1005 JB 1C 104K-T	B	14.6/16.5
C323	4030011230	S.CER	GRM31M2C2H390JV01L (GRM42-6 CH)	T	86.3/45.6
C332	4550007090	S.TAN	TEESVA 1A 226M8R	T	68.5/10.7
C333	4030016970	S.CER	C1005 JB 1E 223K-T	B	25.6/3.6
C334	4030019460	S.CER	C1608 JB 0J 106M-T	T	71.7/16.4
J1	6510028390	S.CON	04-6294-036-000-800	T	60.0/6.8
J2	6510014961	S.CON	B2B-ZR-SM4-TF(LF)(SN)	T	8.9/56.5
J3	6510025940	CON	PJ-3047S <XIN>		
W1	8900011882	CAB	OPC-1210A-1(P0.5N36L70) <TJM>		
W2	7030012290	JUM	RDS2T0R0		
W6	8900015130	CAB	OPC-1131A <TJM>		
EP3	6910018460	S.BEA	MMZ1005Y102C-T	T	24.8/51.5
EP4	6910014730	S.BEA	MPZ2012S331A-T	T	34.7/64.6
EP5	6910020610	S.BEA	BLM15BD102SN1D	B	45.7/26.3

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

SECTION 7 MECHANICAL PARTS

[CHASSIS PARTS]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
W1	8600036881	SP CABLE-1 (FX2493 P01LO)	1
J1	6510004881	MR-DSE-01-1 <GA>	1
SP1	2510001160	057P0802	1
MP1	8010022230	3251 CHASSIS <STM>	1
MP2	8110010130	3251 COVER ASSEMBLY	1
MP3	8930083860	3251 SP RUBBER <KRI>	1
MP4	8930062130	THERMAL SHEET (AP)TC200HS-1.4 (15X23)	1
MP6	8810008661	PHBT M3 X 8 NI-ZC3	11
MP7	8810009611	FLAT M2.6X 6 ZK3	8
MP8	8810005161	CAPBOLT M3 X20 ZK3BLACK	2
MP9	8810009050	SETSCREWH M3 X10 NI	4

[LOGIC UNIT]

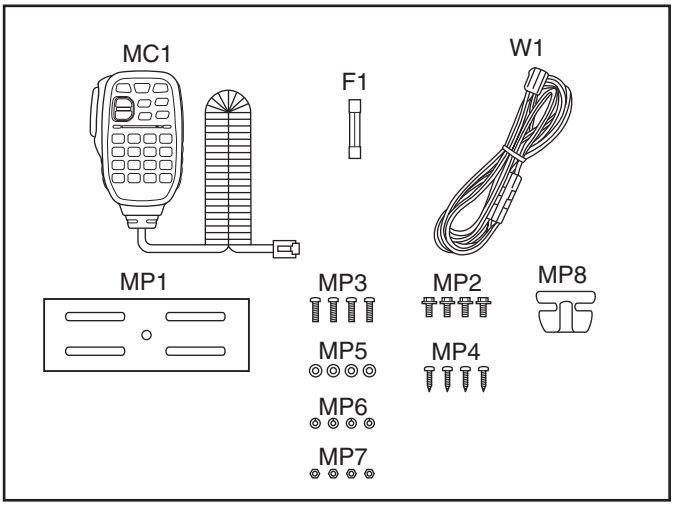
REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1*	6450002210	3017-8821 <KIN>	1
J3*	6510028390	04-6294-036-000-800	1
DS1	5030003530	L1-1207TVM-1 <TES>	1
S1*	2260002740	LS8J2M-T	1
S2*	2260002740	LS8J2M-T	1
S3*	2260002740	LS8J2M-T	1
S4*	2260002740	LS8J2M-T	1
S5*	2260002740	LS8J2M-T	1
S6*	2260002740	LS8J2M-T	1
S7*	2260002740	LS8J2M-T	1
S8*	2260002740	LS8J2M-T	1
S9*	2250000700	EC12E24204A8	1
S10*	2260002740	LS8J2M-T	1
EP9	8930084270	SRCN-3251-SP-N-W	1
MP1	8210027220	3251 FRONT PANEL	1
MP2	8210027230	3251 REFLECTOR	1
MP3	8930083840	3251 2-KEY	1
MP4	8930083850	3251 7-KEY	1
MP5	8930084140	3251 LCD FILTER	1
MP6	8810008761	PHBT M2 X 8 NI-ZC3	4
MP7	8930083870	3251 LCD PLATE	1
MP8	8610014400	KNOB N-400	1
MP9	8610014410	KNOB N-401	2
MP11	8930057890	THERMAL SHEET CF	1

[MAIN UNIT]

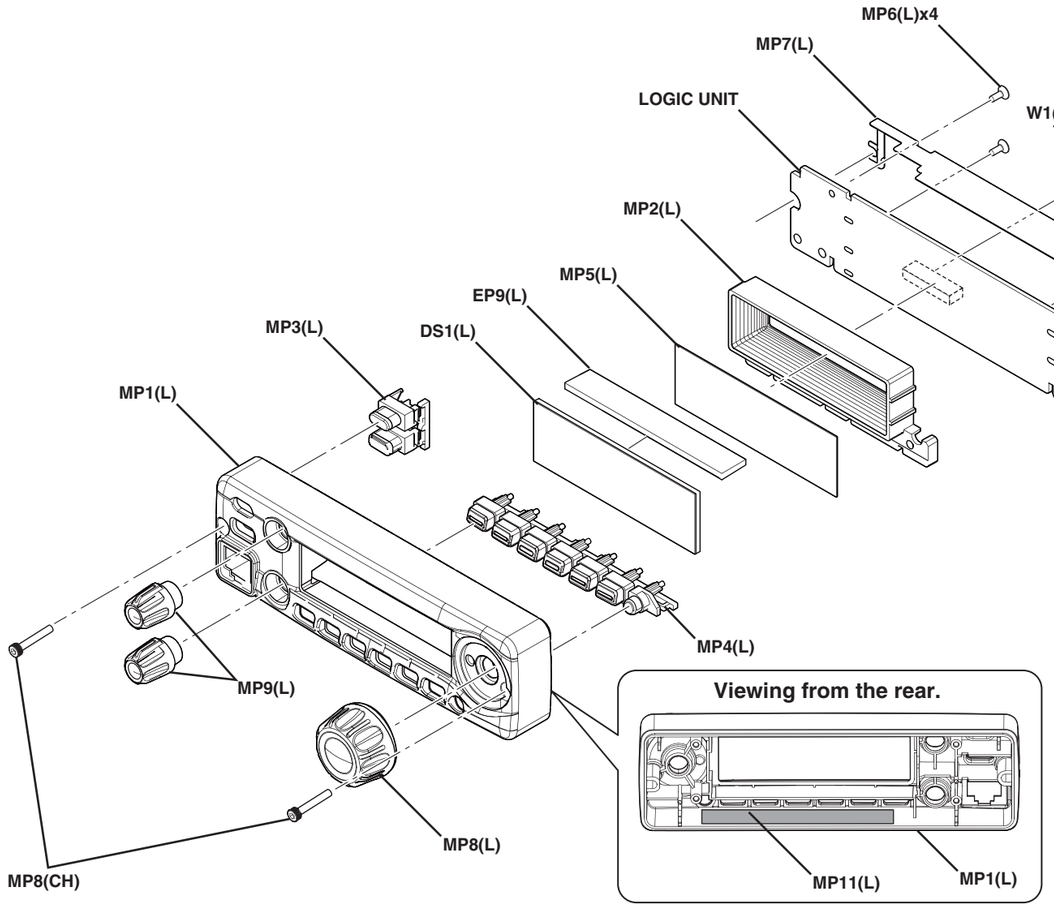
REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1*	6510028390	04-6294-036-000-800	1
J2*	6510014961	B2B-ZR-SM4-TF (LF) (SN)	1
J3*	6510025940	PJ-3047S <XIN>	1
W1	8900011882	OPC-1210A-1 (P0.5N36L70)	1
W2*	7030012290	RDS2T0R0	1
W6	8900015130	OPC-1131A	1
MP2*	8510019350	3179 VCO COVER Y1143	1
MP3*	8410002720	3251 PA HEATSINK	1
MP5*	8510019340	3179 VCO CASE Y1142	1

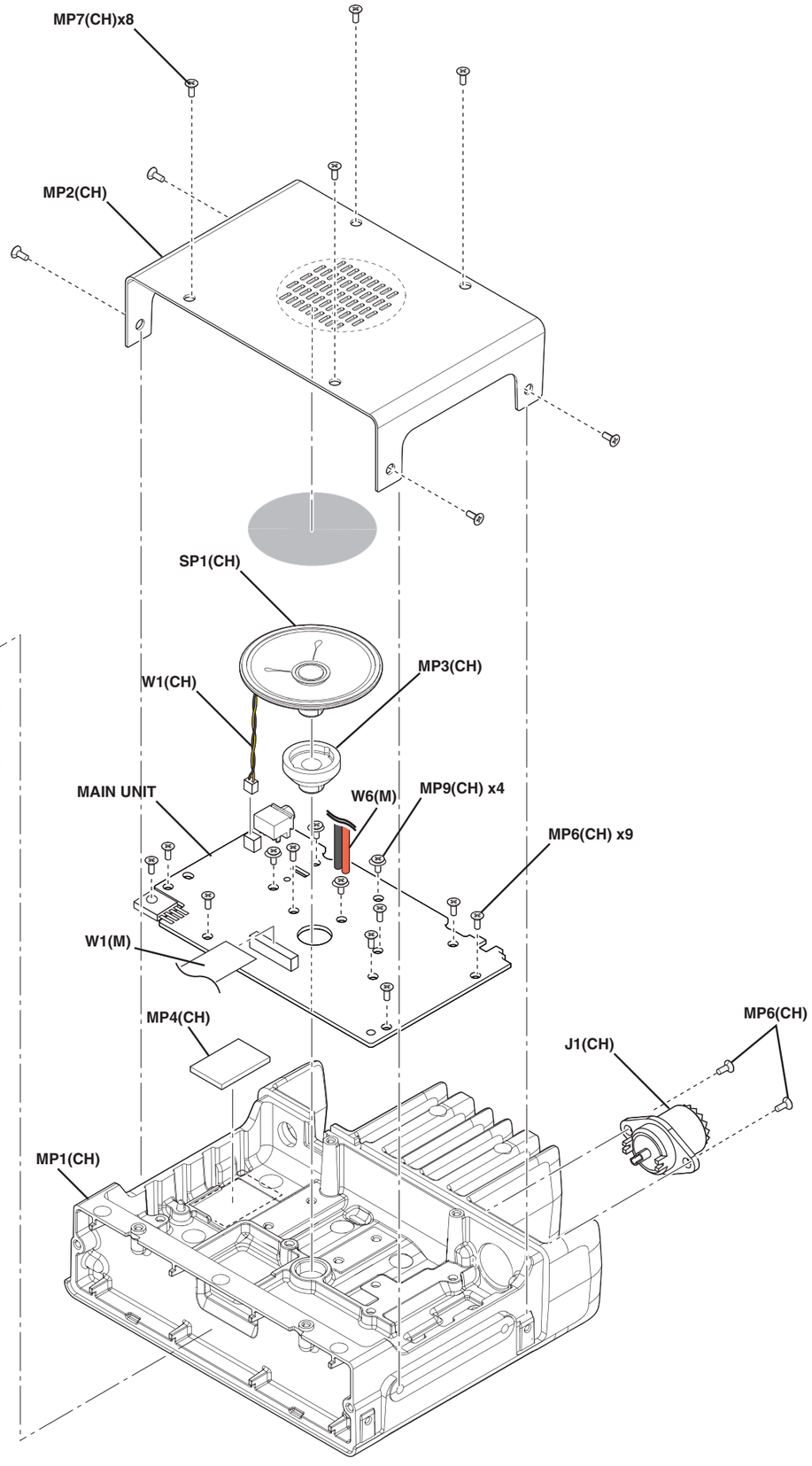
[ACCESSORIES]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
F1	5210000080	FGB 20A (FGB0 125V)	1
MC1	(Optional)	HM-133V	1
W1	8900016610	OPC-1132A ACC	1
MP1	8010019260	2633 MOBILE BRACKET MOQ	1
MP2	8820000530	FLANGE BOLT M4 X 8 NI	4
MP3	8810000471	PH M5 X12 (+–) ZC3	4
MP4	8810000951	PHA M5 X16 ZC3	4
MP5	8850000150	FLAT WASHER M5 NI BS	4
MP6	8850000391	S-WASHER M5 ZC3	4
MP7	8830000121	NUT M 5 ZC3	4
MP8	8930007300	MIC HANGER [USA] only	1



*: Refer to "**BOARD LAYOUTS**" for the location.
Screw abbreviations A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless

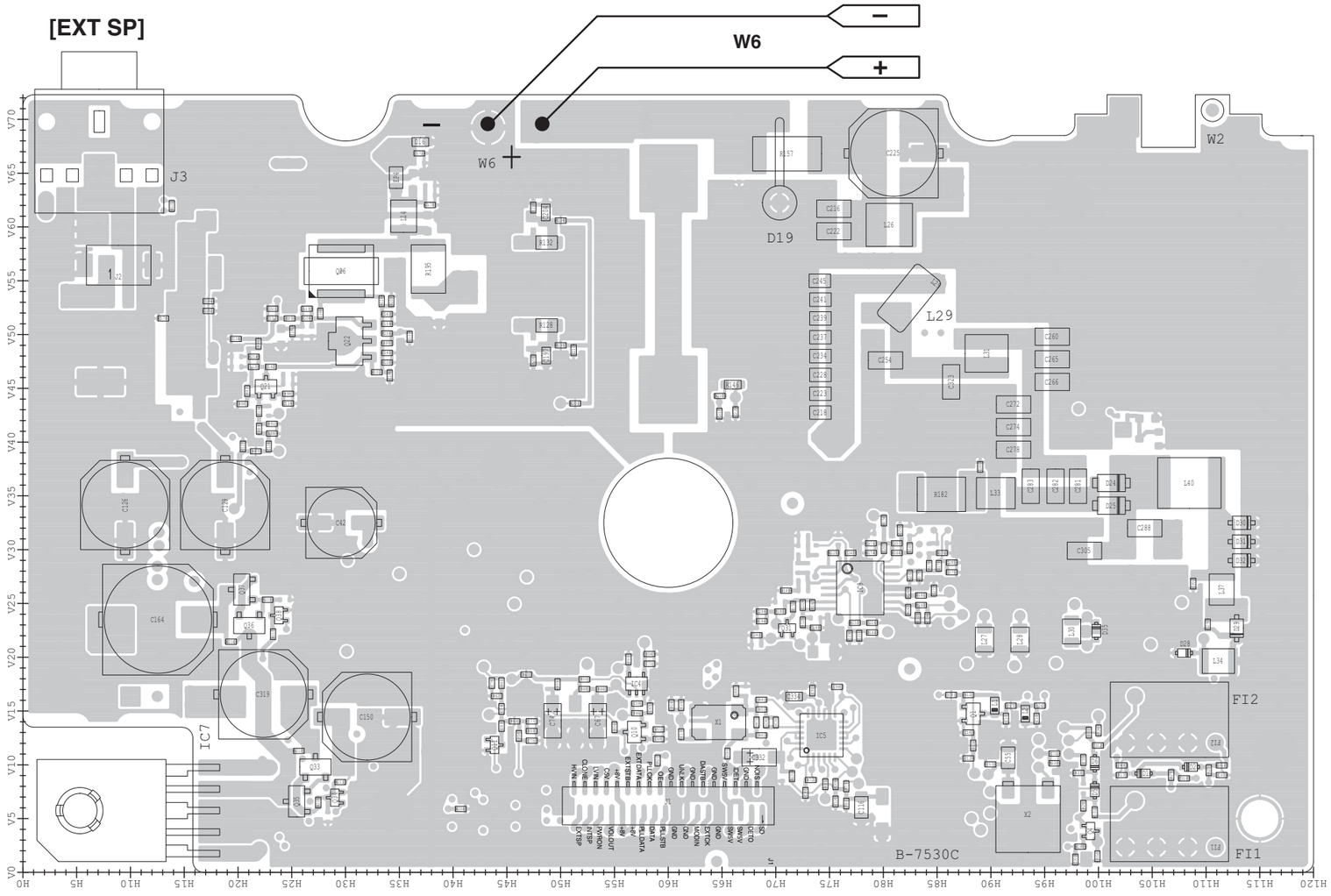

MP6(L)x4
MP7(L)
LOGIC UNIT
W1(M)
MP2(L)
MP5(L)
EP9(L)
DS1(L)
MP3(L)
MP1(L)
MP4(L)
MP9(L)
MP8(L)
MP8(CH)
Viewing from the rear.
MP11(L)
MP1(L)


MP7(CH)x8
MP2(CH)
SP1(CH)
MP3(CH)
W1(CH)
MAIN UNIT
W6(M)
MP9(CH) x4
MP6(CH) x9
W1(M)
MP4(CH)
MP6(CH)
J1(CH)
MP1(CH)

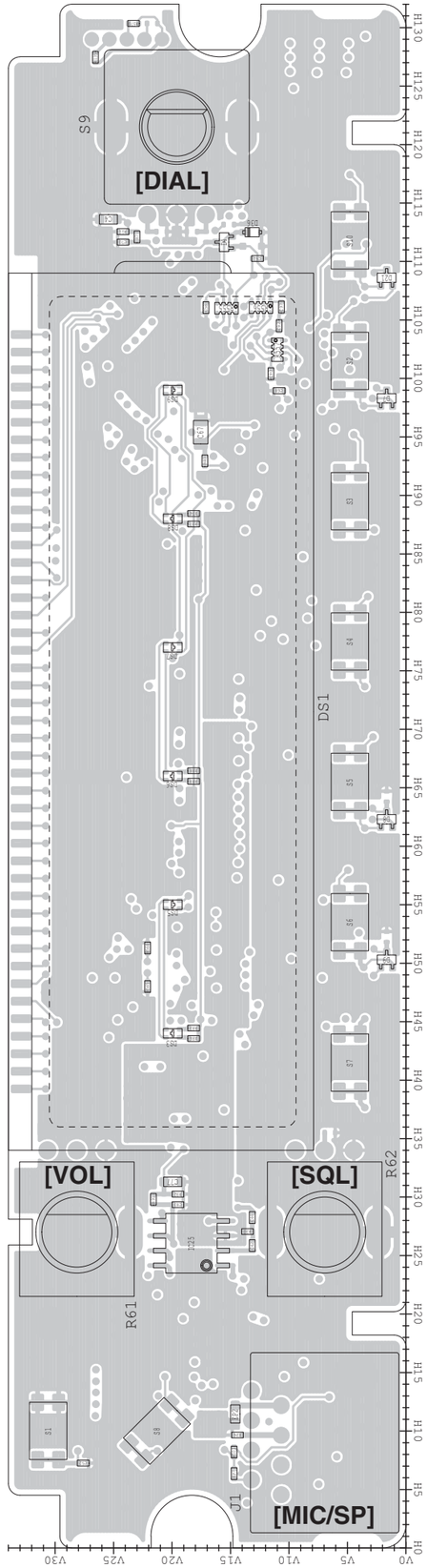
SECTION 8 BOARD LAYOUTS

The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

• MAIN UNIT (TOP VIEW)

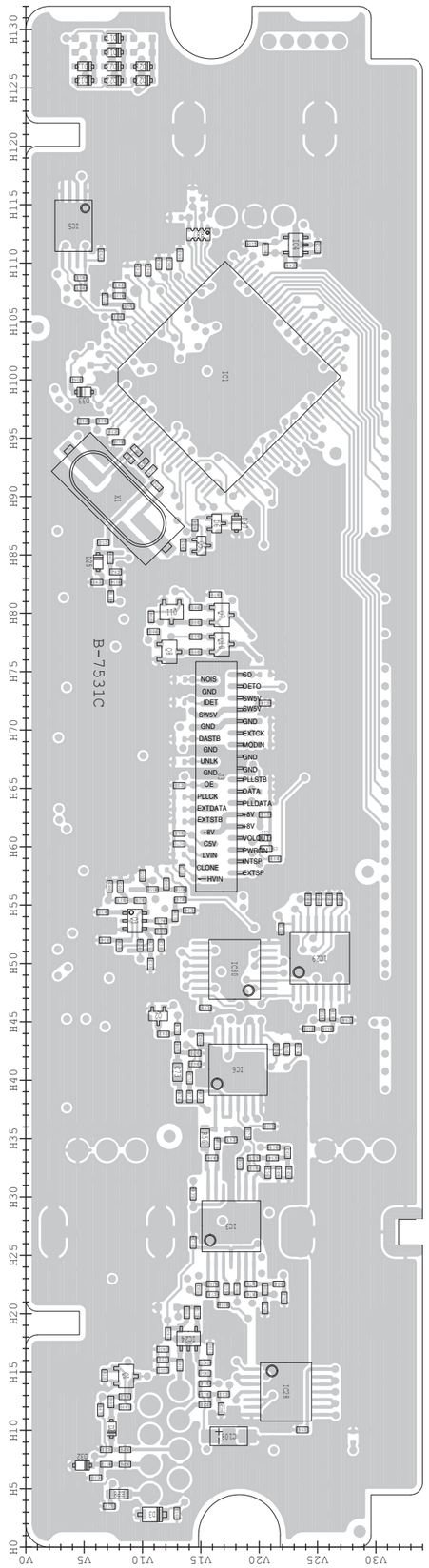


• LOGIC UNIT (TOP VIEW)

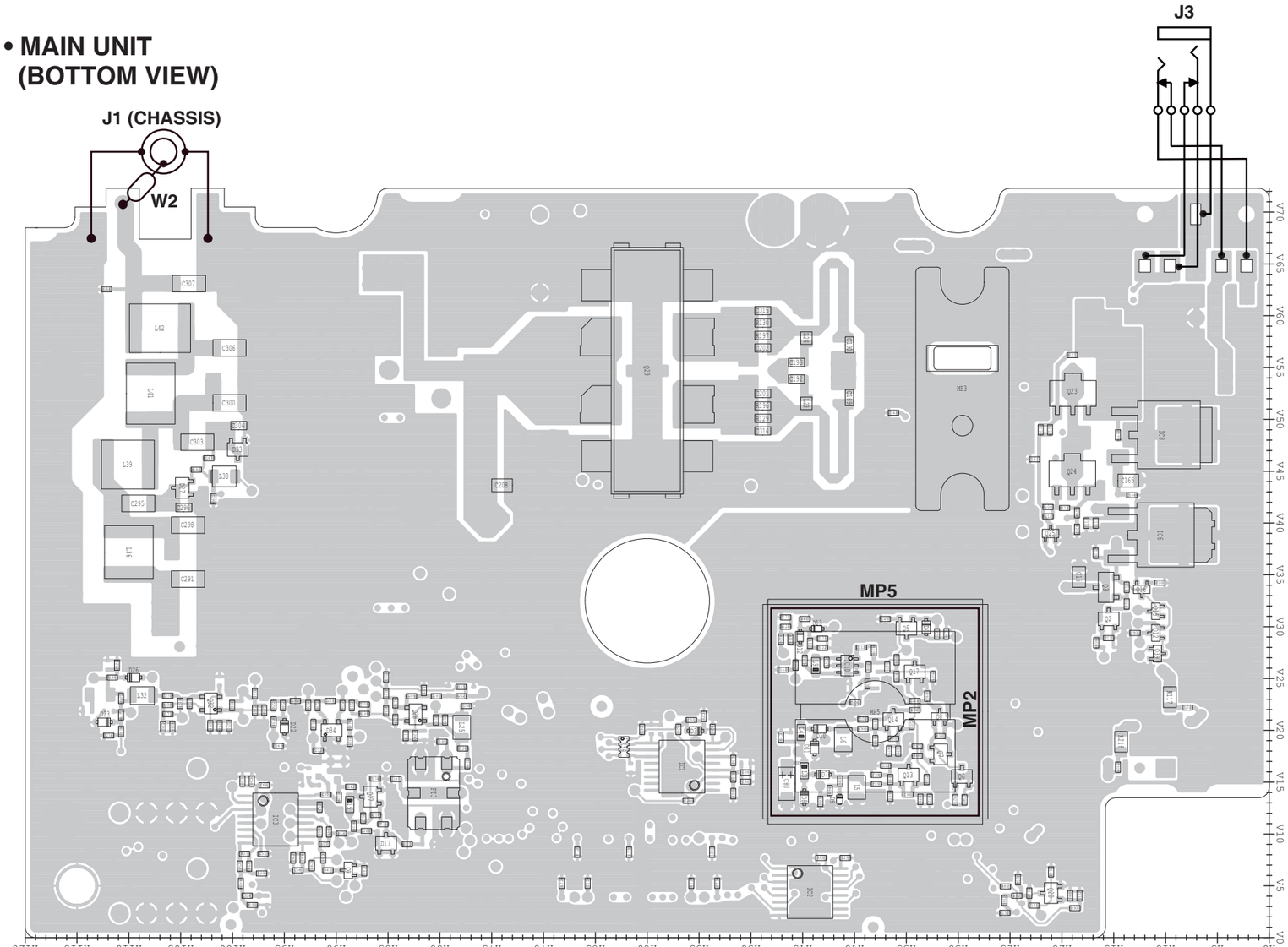


The combination of top side and bottom side of this page shows the actual configuration of P.C. board.

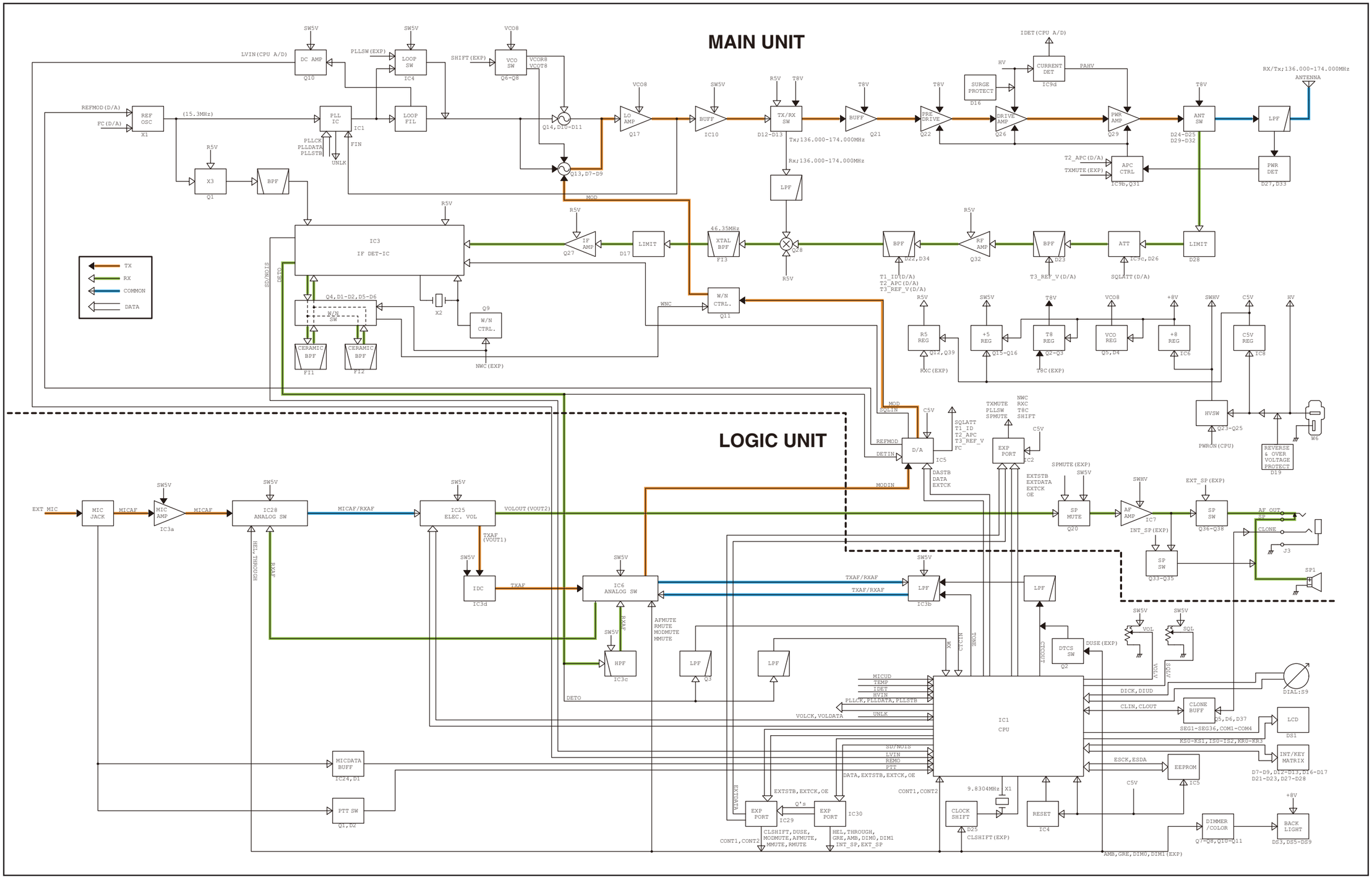
• LOGIC UNIT (BOTTOM VIEW)



• MAIN UNIT (BOTTOM VIEW)

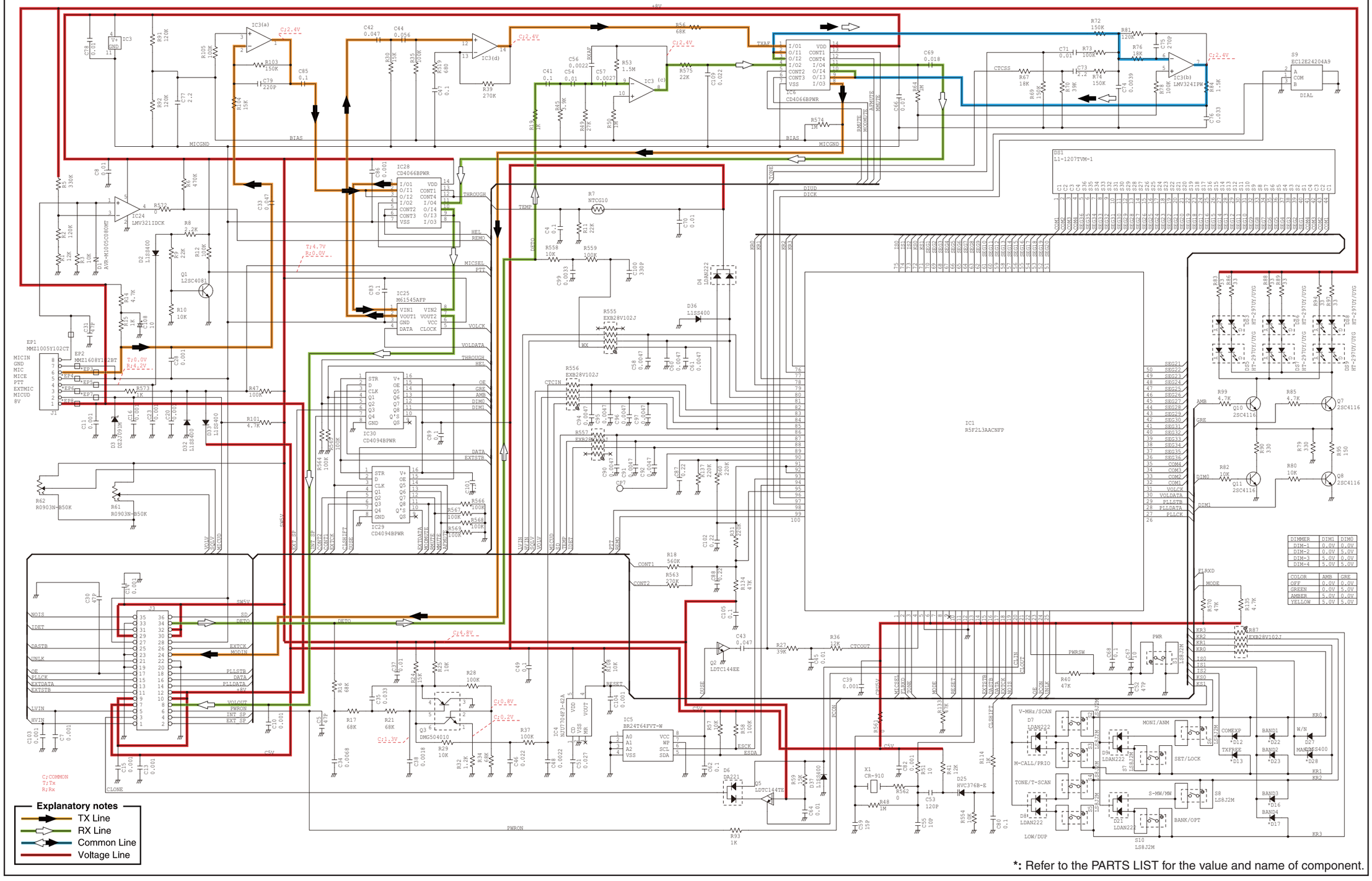


SECTION 9 BLOCK DIAGRAM

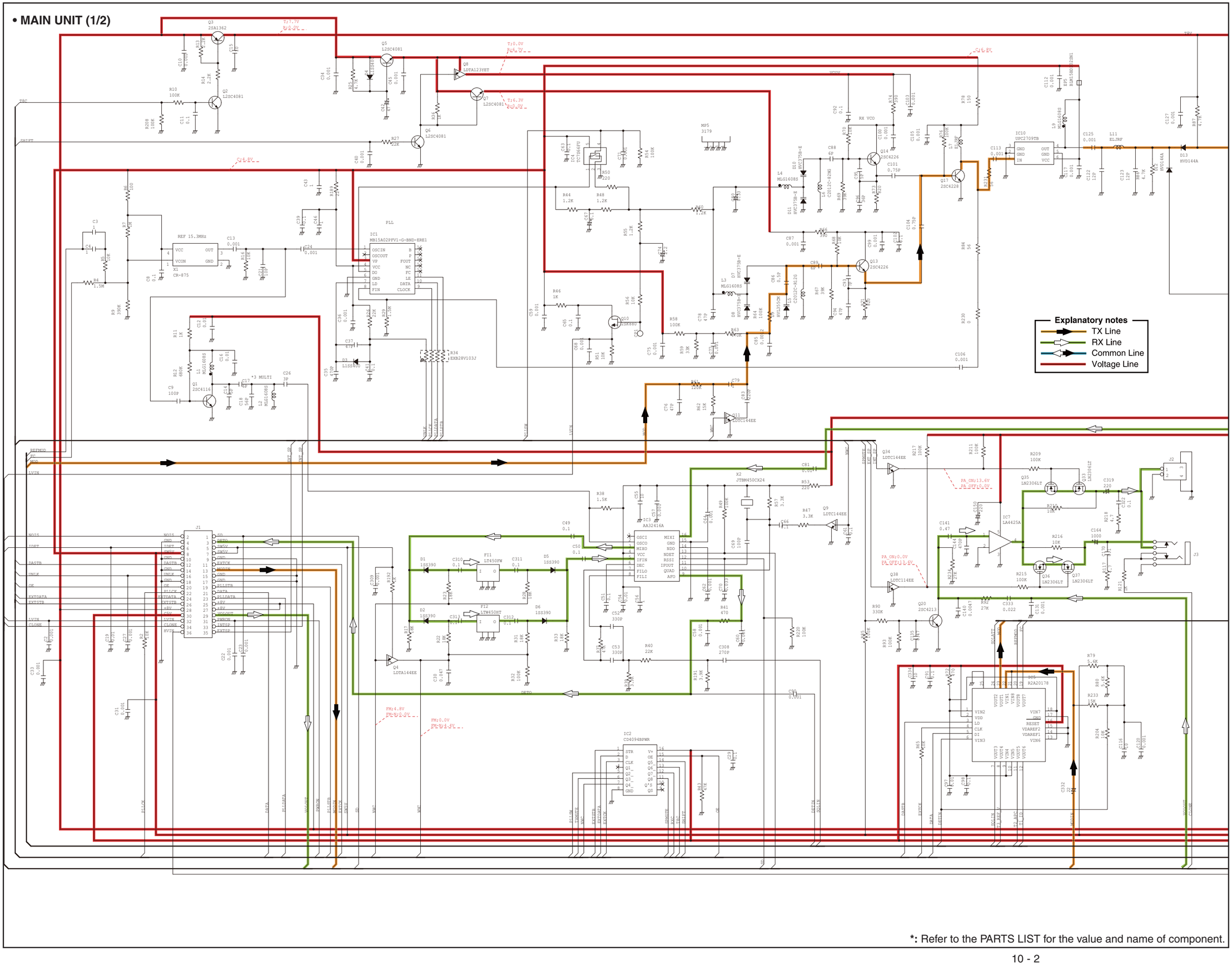


SECTION 10 VOLTAGE DIAGRAM

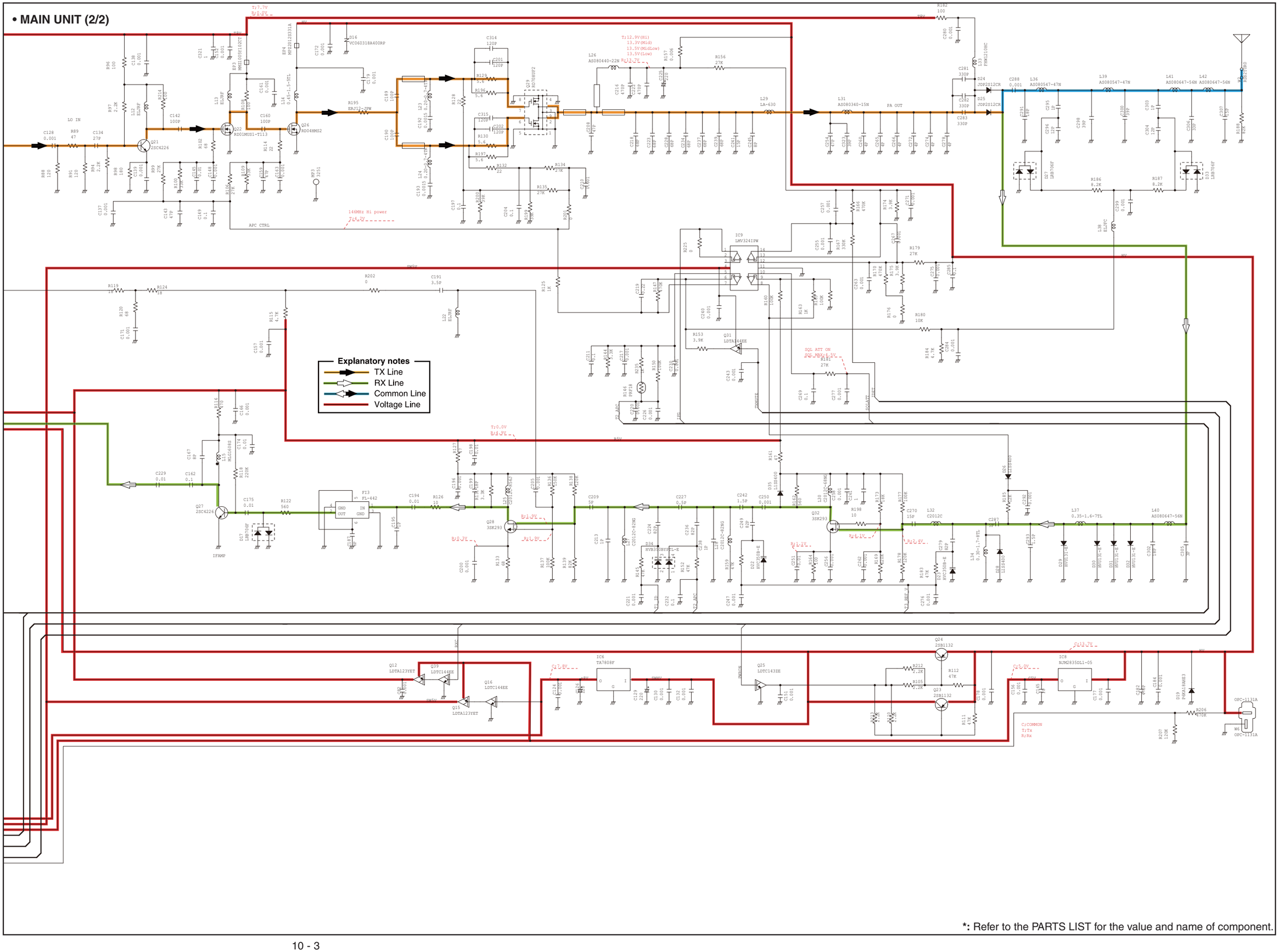
• LOGIC UNIT



• MAIN UNIT (1/2)


Explanatory notes
TX Line
RX Line
Common Line
Voltage Line
*: Refer to the PARTS LIST for the value and name of component.

• MAIN UNIT (2/2)



***:** Refer to the PARTS LIST for the value and name of component.

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